

AECOM

**Participatory Policy
Development
Online survey and in-depth
interview report**

AECOM – the independent consultants who managed and analysed the Greater Manchester Clean Air Plan Participatory Policy Development online survey and in-depth interviews

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0. Executive Summary

0.1 Background

Greater Manchester leaders committed to a participatory approach for the development of the new Greater Manchester Clean Air Plan (GM CAP) – which is proposed to be a non-charging investment led approach – to ensure that the proposals are well-grounded in evidence in terms of the circumstances of affected groups and possible impacts the Plan could have on them, and therefore the overall deliverability and effectiveness of the Plan.

There have been three strands of activity to the participatory activity:

1. Targeted engagement sessions with key stakeholders – vehicle-owning groups and other impacted individuals, such as community, business, environment and equality-based groups:
2. An online survey with businesses and organisations who own or drive at least one type of vehicle from the three vehicle types; and
3. Additional in-depth interviews with owners of vehicles which would be non-compliant under the proposed requirements for the GM CAP.

Transport for Greater Manchester (TfGM) on behalf of the 10 local authorities in Greater Manchester held the targeted engagement sessions while AECOM completed the online survey and in-depth interviews and this report provides the findings for these two strands of activity.

Three types of vehicle owners were targeted through the survey and interviews:

- Heavy Goods Vehicles (HGV);
- Coaches; and
- Taxis (including hackney carriage and private hire vehicles).

Data collection was undertaken using two methods:

- **Online survey** respondents were invited to complete the survey following targeted engagement sessions with TfGM, organisations cascaded an online link. Respondents were **self-selecting** making the results **indicative rather than representative**.
- **In-depth interviews:** with respondents recruited separately to the online survey, each interview took up to 60 minutes.

0.2 Taxis

Response

- 904 respondents overall responded to the survey including 10 taxi trade organisations
- 16 additional respondents took part in in-depth interviews:
 - 6 hackney carriage;
 - 6 Private hire vehicle owner drivers;
 - 4 Private hire vehicle operators
- 43% of all responses were from those licensed in Manchester (30% of taxis are licensed by Manchester). Oldham, Rochdale, Stockport, Trafford and Wigan all had a response of 5% or less

Taxi profile	Hackney carriage (n)	Private hire vehicles (n)
Owner operator	81	86
Owner driver	201	452
Track (rent) vehicle	34	75
Total number of taxi owner/drivers	316*	614*

*36 respondents operate both types of taxi

Findings – Current status	Hackney carriage (n)	Private hire vehicles (n)
Majority drive within Greater Manchester at least 5 days a week	281	551
Only own one vehicle	265	533
Own at least one vehicle which has emissions not compliant to the proposed CAP	226	236
Total number of taxi owner/drivers	316	614

Findings – Future planning

- **Purchase costs (52%)** and **vehicle running costs (45%)** are the most important factors in a vehicle purchase decision making process. **Licensing standards** and **vehicle age** are next (**37% and 36%**)
- **66%** will need to **borrow funds** to pay for their next vehicle, **8%** will **buy outright**
- **By the end of 2024:** 39% of hackney carriage drivers plan to own a compliant vehicle and 60% of private hire vehicle drivers plan to own a compliant vehicle

Findings – Future thinking

- **34% of private hire vehicle drivers (PHV)** would choose a **petrol hybrid** next
- **33% of hackney carriage** would choose a **diesel** next (23% PHV)

Findings – Electric vehicles

- **28% (hackney carriage)** and **14% (PHV)** stated when they next replace their vehicle they intend to purchase an electric vehicle
- **8%** of the 894 drivers/operators **currently use electric vehicles. Of the remainder:**
 - Hackney carriage: 36% would potentially purchase an EV in the next two years, a further 35% in the next five years
 - Private hire vehicles: 34% would potentially purchase an EV in the next two years, a further 35% in the next five years

Views about the current funding and market conditions

- With **CAP uncertainty** some drivers are reluctant to invest in a new vehicle
- **Funding values are too low** according to drivers, operators, with suggestions from taxi trade organisation of funding between 25% and 50% of the vehicle value.
- **Funding process and communication** needs to be easier and clearer moving forward
- **Over the last two years** increased costs of vehicles and taxi trading conditions, along with CAP uncertainty has delayed most drivers from replacing a vehicle.

0.3 Heavy Goods Vehicles (HGV)

Response

- 192 respondents with HGVs
- 45 respondents with specialist HGVs. 21 owned both HGV and specialist HGVs
- 8 additional respondents took part in in-depth interviews

Profile	HGV (n)	Specialist HGV (n)
Business/organisation based in Greater Manchester	156	32
Business/organisation based outside Greater Manchester, operates inside	36	13
Total number of HGV/Specialist HGV owner/operators	192	45

Findings – Current status:	HGV (n)	Specialist HGV (n)
Drive within Greater Manchester 5 days a week	152	24
Number of vehicles owned: one to four	89	30
Number of vehicles owned: five to nineteen	63	9
Own at least one vehicle which has emissions not compliant to the proposed CAP	135	39
Total number of HGV/Specialist HGV owner/operators	192	45

Findings: HGV only

Future planning

- **Purchase costs (54%)**, **reliability (51%)** and **vehicle running costs (42%)** are the most important factors in a vehicle purchase decision making process
- Specific vehicle requirements which meet business objectives to meet customer needs are also considered important
- **56%** will need to **borrow funds** to pay for their next vehicle, **28%** will **buy outright**

Future thinking

- **35% of HGV businesses** plan to **buy a new vehicle next** (mainly medium/large business), with 7% likely to buy an HGV up to two years old
- **32% of HGV businesses** plan to **buy a vehicle three to five years old next** (mainly smaller business) with 31% likely to buy an HGV at least six years old. 6% do not know

Views about the current funding and market conditions

- **Funding values are too low** for the current market according to business owners, with suggestions that funding should be at least 25% of the vehicle value
- **Funding process and communication** needs to be easier and clearer moving forward
- **Over the last two years** vehicle availability (new and used) and market conditions have delayed most drivers from replacing a vehicle

0.4 Coaches

Respondent profile

- 21 respondents with coaches responded to the online survey
- 7 based inside Greater Manchester and 13 outside Greater Manchester
- 6 additional respondents took part in in-depth interviews, with a mix of those based inside and outside Greater Manchester

Findings – Current status

	Coach (n)
Majority drive within Greater Manchester at least 5 days a week	8
Number of vehicles owned: one to four	14
Own at least one vehicle which has emissions not compliant to the proposed CAP	20
Total number of coach owner/operators	21

Future planning

- Purchase cost, running costs, reliability, low emissions and make or model were all key factors for respondents when purchasing vehicles
- Drivers mentioned the need to purchase accessible vehicles which impacts their vehicle choice
- Most (15 out of 21) plan to borrow money to purchase their next vehicle

Future thinking

- When next replacing their vehicle, half plan to purchase one aged three to five years old
- Some respondents stated they upgrade when they need to, when the coach is no longer fit for purpose and generally they try to keep the vehicles running as long as they can
- Most look to buy second hand as the outlay to buy new, is too much, especially in the current financial climate

Views about the current funding and market conditions

- Some felt the funding amounts were low in comparison to the cost of new vehicles which left too big a gap in funds that operators would have to source themselves
- Concerns whether funding was for new vehicles only, and the ease of finding a dealer who would accept the funding for replacement vehicles
- For most, current market conditions has impacted how often they replace vehicles

1. Introduction

1.1 Background

Greater Manchester leaders committed to a participatory approach for the development of the new Greater Manchester Clean Air Plan (GM CAP) - which is proposed to be a non-charging investment led approach - to ensure that the proposals are well-grounded in evidence in terms of the circumstances of affected groups and possible impacts the Plan could have on them, and therefore the overall deliverability and effectiveness of the Plan.

There have been three strands of activity to the participatory activity:

1. Targeted engagement sessions with key stakeholders who were vehicle-owning groups and other impacted individuals, such as community, business, environment and equality-based groups;
2. An online survey with businesses and organisations who own or drive at least one type of vehicle from the three vehicle types; and
3. Additional in-depth interviews with owners of vehicles which would be non-compliant under the proposed requirements for the GM CAP.

Transport for Greater Manchester (TfGM) on behalf of the 10 local authorities in Greater Manchester held the targeted engagement sessions, AECOM completed the online survey and in-depth interviews and this report provides the findings for these two strands of activity.

Three types of vehicle owners were targeted through the survey and interviews:

- Heavy Goods Vehicles (HGV);
- Coaches; or
- Taxis (including hackney carriage and private hire vehicles).

1.2 Methodologies

Online surveys and in-depth interviews ran concurrently from Monday 5th September to Monday 10th October 2022, the methodologies applied to both are described in this section.

1.2.1 Online survey

Two 10 minute survey questions were collaboratively designed by TfGM and AECOM and approved by the 10 Greater Manchester Local Authorities, with separate questions for each of the HGV, Coach and Taxi respondents. Where possible, consistency of questions for all three types of respondent was maintained.

The main topics were:

- About the vehicle(s) and travel in and around Greater Manchester;
- Factors influencing the purchase decision of vehicles;
- Taxis only: views on electric vehicles;
- Attitudes to funding to upgrade vehicles and experience with current funding; and
- Business and demographic profiling.

A copy of the questions asked for each survey is provided in **Appendix A**.

AECOM scripted the survey using Askia software and provided weblinks to enable all types of respondents to complete the survey online. The links to complete the survey were provided to industry representatives to cascade to their members after each relevant targeted engagement session, a list of the representatives is shown in **Appendix B**.

The qualification criteria to complete the survey is shown in Table 1.1.

Table 1.1 Qualification criteria for each type of vehicle

Respondent type*	Criteria
HGV**	A business or organisation who own at least one HGV or Specialist HGV and are either based in Greater Manchester or travel into Greater Manchester.
Coach**	A business or organisation who own at least coach and are either based in Greater Manchester or travel into Greater Manchester
Taxi**	A hackney carriage owner/driver or private hire operator or owner/driver. Licensed drivers, whether they own or rent a vehicle were eligible as were drivers licensed outside Greater Manchester.

*Owners of buses were out of scope of the survey unless they also operated one of the three vehicle types listed.

**Representatives of trade organisations were also invited to participate.

The profile of respondents who completed each survey is shown in **section 2.2**.

1.2.2 In-depth interviews

A discussion guide for each of the HGV, Coach and Taxi industries was designed by AECOM and approved by TfGM and the 10 Greater Manchester Local Authorities. Where possible, consistency of questions for all three types of respondent was maintained.

The main topics for the in-depth interviews were:

- Current market conditions;
- Awareness of the GM CAP and attitudes to the proposed non-charging plan;
- Attitudes to funding and experience with current funding;
- Using ANPR to identify non-compliant vehicles; and
- Other suggestions to reduce nitrogen dioxide in Greater Manchester.

A copy of the discussion guides are provided in **Appendix C**.

In-depth interviews took place with owners and financial decision makers of each of the three types of vehicles. All respondents were required to own at least one non-compliant vehicle.

The additional criteria per vehicle type is shown in Table 1.2.

Table 1.2 In-depth interview respondent criteria

Respondent type*	Criteria
HGV	A mix of businesses based in Greater Manchester and / or who drive in to Greater Manchester.
Coach	A mix of businesses based in Greater Manchester and / or who drive into Greater Manchester.
Taxi	A mix of hackney carriage and private hire vehicle owner/operators all licensed in Greater Manchester. A mix of Greater Manchester districts where owner/operators are licensed.

30 interviews took place, each interview lasted approximately 60 minutes to complete and was undertaken by an AECOM trained moderator.

The profile of respondents who participated in the in-depth interviews is shown in **section 2.3**.

1.3 Analysis and reporting

1.3.1 Online survey

The survey was open to all respondents who met the qualification criteria, and the method of recruitment meant respondents were self-selecting. Due to the method of recruitment, survey results should be viewed as indicative for each industry and any identified sub-groups rather than representative.

Where percentages do not sum to 100 per cent in the main body of the report, this is due to rounding or where more than one response was permitted.

Statistical significance testing was completed. Where results are reported as different between sub samples, this means the differences are statistically significantly different. Only data which is significantly different has been referenced in the report.

1.3.2 In-depth interviews

Each in-depth interview was recorded and transcribed. Notes taken during the interview along with the transcription formed the basis for analysis and reporting.

Moderators attended de-brief meetings to share learnings and similarities and differences in responses provided at an early interim stage and once all interviews had been completed.

1.4 Report format

Following this introduction:

- Chapter 2: describes the respondent profile for the online survey and in-depth interviews;
- Chapter 3: details the key findings for the taxi industry;
- Chapter 4: details the key findings for HGV and Specialist HGVs;
- Chapter 5: details the key findings for coaches; and
- Chapter 6: provides some additional feedback from all types of respondents about ANPR cameras and suggestions for reducing levels of Nitrogen Dioxide (NO₂) in Greater Manchester.

2. Respondent profile summary

2.1 Introduction

This section shows the profile of respondent by methodology, namely:

- **Online survey:** Taxis, HGVs and Specialist HGVs, and Coaches.
- **In-depth interviews:** Businesses who own a non-compliant taxi, HGV or coach.

2.2 Online survey

The total number of responses for each respondent type is shown in Table 2.1. A full set of tables by type of respondent is shown in **Appendix D**.

Table 2.1 Total number of surveys completed

Type of vehicle	Total	%
Taxi	904	79
HGV and/or Specialist HGV*	216	19
Coach	21	2
Total	1,141	100

*24 respondents answered for both HGV and Specialist HGVs

2.2.1 Taxi survey: Type of respondent

82% of respondents were licensed drivers, with the majority (71%) owning their vehicle.

Table 2.2 Total interviews by respondent type

Respondent type	Total	%
Owner Operator	149	17
Owner Driver	641	71
Track Driver (rent vehicle)	104	11
Taxi Trade Organisation	10	1
Base	904	100

Two thirds of respondents (65%) were PHV respondents; 31% had hackney carriage vehicles.

Table 2.3 Taxi service provided by respondent type (%)

Respondent type	Hackney Carriage	Private Hire Vehicle	Both Hackney Carriage and PHV
Owner Operator	23	12	47
Owner Driver	67	76	36
Track Driver (rent vehicle)	10	12	17
Base (count)	280	578	36

2.2.2 Taxi survey

Current compliance with emission levels

72% of those who operate a hackney carriage have at least one vehicle which would not be compliant¹ with the emissions levels for the proposed GM CAP and 39% of those who operate a private hire vehicle would not be compliant.

The proportion of vehicles with at least one non-compliant per district ranged from 62% in Trafford to 36% in Salford.

Licensing district

Most of the respondents are licensed in Manchester (43%) of which 59% had at least one non-compliant vehicle, followed by Salford (17%) and Bolton (13%)

2.2.3 HGV survey: Type of respondent

Table 2.4 shows that the majority of responses were from businesses with eight responses from organisations based inside or outside Greater Manchester and 81% of respondents reported they were based in Greater Manchester.

Table 2.4 Total Interviews by Respondent Type

Respondent type	Total	%
Business based inside Greater Manchester	168	78
Business based outside Greater Manchester that travels into Greater Manchester	40	19
Organisation based in Greater Manchester	6	3
Organisation based outside Greater Manchester	2	1
Base	216	100

Nearly all respondents (89%) operate a heavy goods vehicle (HGV) to move supplies, make deliveries etc. 80% of those who operate an HGV were registered in Greater Manchester.

2.2.4 HGV survey: Current compliance with emissions levels

71% of those who operate an HGV have at least one vehicle which would not be compliant with the emissions levels for the proposed GM CAP and similarly, 87% of those who operate a Specialist HGV would not be compliant.

83% of sole traders own at least one non-compliant HGV (of which, 80% were based inside GM) and 55% of medium or large businesses own at least one non-compliant vehicle. This data has low base sizes therefore should be considered indicative and treated with caution.

2.2.5 Coach survey

There were 21 respondents who operated coaches of which 19 operated inside Greater Manchester.

- Two businesses who operate coaches do not operate a coach service in Greater Manchester, they offer training; and

¹ Respondents were provided with a note in the survey to explain that their vehicle registration document (V5C) would help identify their vehicle's Euro emission standard. Once they knew that, then they were able to identify if their vehicle would be compliant or non-compliant based on being Euro 5 or earlier (non-compliant) or Euro 6 onwards (compliant).

- Twelve businesses said that some of their coaches are non-compliant and eight said all are non-compliant, one business owned coaches which are all compliant.

2.3 In-depth interviews

Thirty in-depth interviews took place and **Appendix E** shows the full profile of respondents who took part. All were owners of at least one non-compliant vehicle and were:

- A mix of hackney carriage and private hire vehicle owners and operators licensed in various districts of Greater Manchester; and
- A mix of HGV businesses and coach operators who were based inside Greater Manchester, or based outside Greater Manchester but who travelled in.

3. Findings: Taxi industry

3.1 Introduction

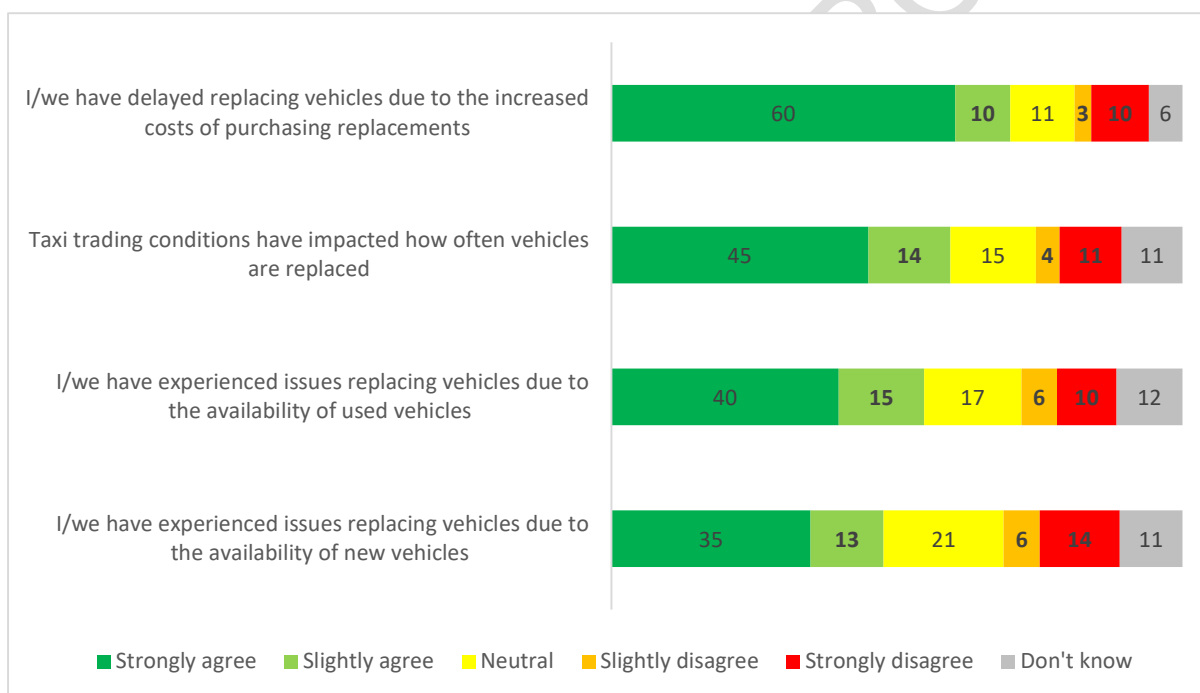
In this section the findings from the taxi survey are shown with supplementary detail delivered by the in-depth interviews.

3.2 Replacing vehicles

3.2.1 Trading conditions over the past two years

Over two thirds (70%) of those in the taxi industry had delayed replacing their vehicles due to increasing costs. Taxi trading conditions (59%), availability of used vehicles (55%) and availability of new vehicles (48%) had all affected respondents' ability to replace their vehicles over the last two years. There was very little difference in response between hackney carriage and private hire vehicle drivers or operators.

Figure 3.1 Attitudes to replacing vehicles based on trading conditions over the last two years (%)



Base: 894 (All respondents excluding those who responded from taxi trade organisations)

Additional findings:

Drivers of a non-compliant vehicle were more likely to agree that they had delayed replacing vehicles due to increased costs than those who already had a compliant vehicle (72% hackney carriage and 73% PHV compared to 51% and 65% respectively).

Trading conditions: Evidence from the in-depth interviews

Taxi drivers and operators commented that they experienced limited availability in both new and used compliant vehicle markets, with some waiting over 12 months for a new vehicle.

“there’s no second-hand market anymore” (hackney carriage driver)

“We were due to take a short-term lease as well as some pure electrics ... we were due to take ten of them, but that was in March, that was pushed back to the summer and then that was pushed back [due to a lack of availability of the vehicles]” (PHV operator)

“the availability of cars has been the biggest bugbear” (PHV driver)

Both hackney carriage and private hire vehicle drivers and private hire vehicle operators commented that purchasing a vehicle is becoming increasingly more expensive, with the supply shortages of new vehicles making the second-hand market prices increase considerably.

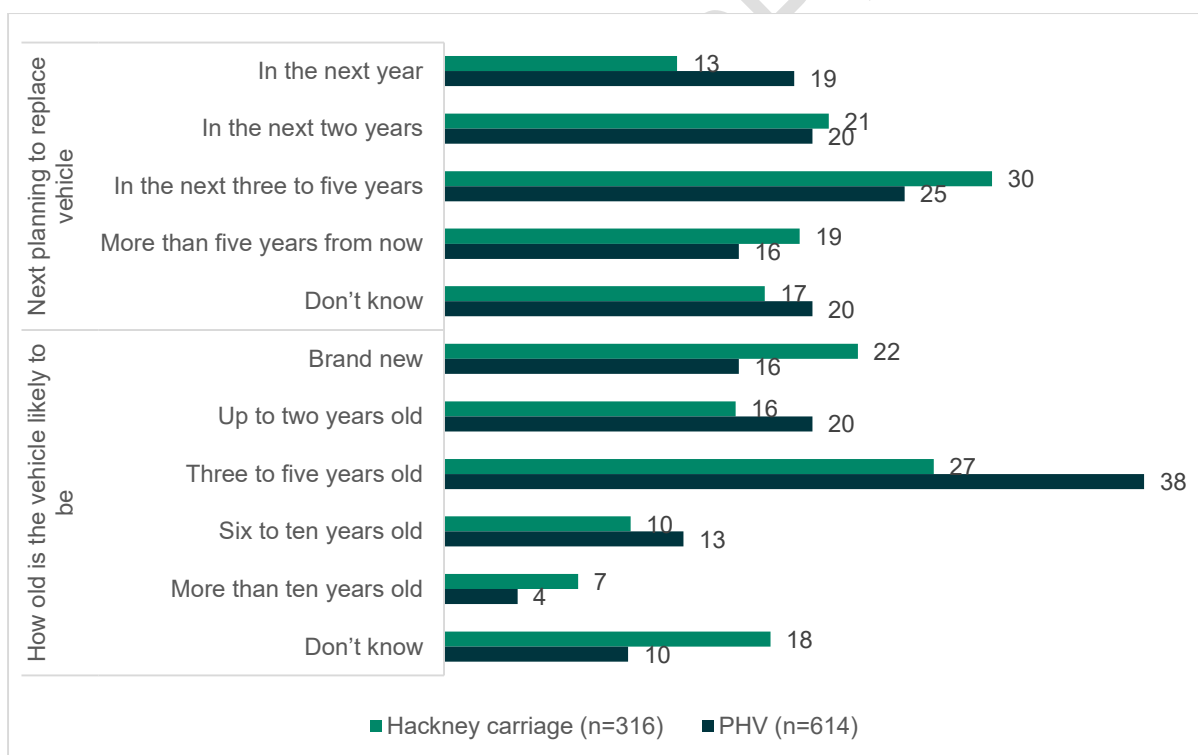
“very hard ... you just can’t get the vehicles at the moment. We’re having a lot of problems with sourcing vehicles ... what’s made it even harder is that they’ve put the prices up on all the vehicles ... but even a second-hand car, the price is so expensive that for example, I’ve got a three-year-old car, I could probably sell it at the same price that we bought that car at (PHV operator)

3.2.2 Vehicle purchase

Timing for the next vehicle purchase: all taxi respondents

Drivers were asked how soon they may purchase their next vehicle and the age of this vehicle; 30% of hackney carriage respondents were planning to replace their vehicle in the next three to five years whilst 25% of PHV respondents said the same. 38% of PHV respondents would buy a vehicle three to five years old compared to 27% of hackney carriage respondents with a further 20% of PHV respondents saying they would buy a vehicle up to two years old.

Figure 3.2 When the next vehicle will be purchased and likely vehicle age (%)



Base: All respondents excluding those who responded from taxi trade organisations

Timing for the next vehicle purchase: non-compliant taxi respondents

Table 3.1 shows when non-compliant hackney carriage drivers plan to purchase their next vehicle and the age of the vehicle. The shaded area shows 60 out of 226 non-compliant hackney carriage drivers (27%) will purchase a vehicle in the next two years which will be at least five years old and therefore be compliant.

Table 3.1 Non-compliant hackney carriage owners: when they will replace their next vehicle and likely age of that vehicle

	Brand New	Up to two years old	Three to five years old	Six to ten years old	More than ten years old	Don't know	Total
In the next year	16	3	5	3	1	1	29
In the next two years	5	16	15	4	4	5	49
In the next three to five years	13	12	25	8	5	12	75
More than five years from now	2	4	16	7	4	3	36
All respondents	40	40	65	26	18	37	226

Base: 226 hackney carriage operator/owner/drivers with at least one non-compliant vehicle

Those who stated they don't know when they'd purchase a vehicle are only included in all respondents.

Table 3.2 shows when non-compliant private hire vehicle drivers plan to purchase their next vehicle and the age of the vehicle. The shaded area shows 92 out of 236 non-compliant private hire vehicle drivers (39%) will likely purchase a vehicle in the next two years which will be at least five years old and therefore be compliant.

Table 3.2 Non-compliant private hire vehicle owner/operator/drivers: when they will replace their next vehicle and likely age of that vehicle (%)

	Brand New	Up to two years old	Three to five years old	Six to ten years old	More than ten years old	Don't know	Total
In the next year	20	9	19	9	3	5	65
In the next two years	6	10	28	8	1	0	53
In the next three to five years	7	6	27	5	2	3	50
More than five years from now	1	2	13	8	5	1	30
All respondents	38	29	96	39	13	21	236

Base: 236 private hire vehicle operator/owner/drivers with at least one non-compliant vehicle

Those who stated they don't know when they'd purchase a vehicle are only included in all respondents.

Likely spend: All respondents

When drivers were asked how much they would pay for the vehicle and how they would pay for it, just over half (55%) of all respondents expected to spend less than £20,000 of which 23% would spend less than £10,000. Half the respondents would use finance, and 66% expected to borrow money to purchase the vehicle. A fifth (19%) did not know.

The amount of time before the next purchase and the amount a driver was expecting to pay showed little difference.

Likely spend: Non-compliant owner/operator/drivers

68% of those with at least one non-compliant private hire vehicle and 43% with at least one non-compliant hackney carriage vehicle expected to spend up to £20,000 on their next vehicle. A third (33%) of hackney carriage drivers and 17% of private hire vehicle thought they would spend over £20,000.

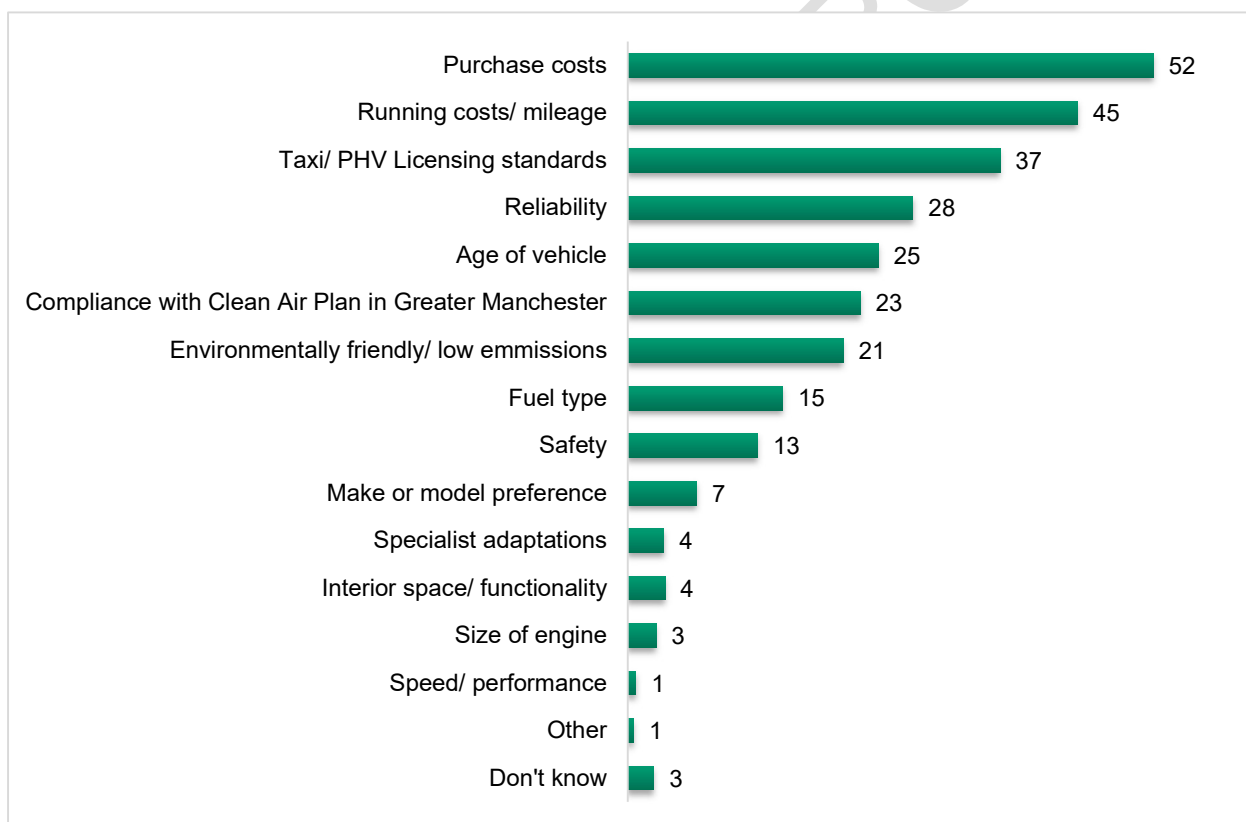
Most important factors when purchasing a vehicle: All respondents

Respondents were asked to select the three most important factors when purchasing a vehicle. Purchase costs and running costs are seen to be the most important factors and this is true, irrespective of when respondents plan to replace their next vehicle. Licensing standards was also considered to be one of the most important factors after financial factors.

Those who did not say purchase costs were one of the most important, stated licensing standards (51%), low emissions (37%) and CAP compliance (33%) as important factors.

The outcomes did not vary significantly between hackney carriage and private hire vehicles.

Figure 3.3 Most important factors to consider when purchasing the next vehicle (%)



Base: 894 (All respondents excluding those who responded from taxi trade organisations)

Vehicle purchase: Evidence from the in-depth interviews

The in-depth interviews provided further evidence about why the top three most important options had been selected in the survey.

Purchase Cost (52% considered this a factor in the survey)

- Many said they looked to purchase second-hand vehicles due to the cost of new, compliant vehicles being high. Respondents shared that the cost of new vehicles ranged from £25,000 to £80,000 with second-hand vehicles costing £19,000 - £30,000, with higher prices quoted by hackney carriage drivers.

- When upgrading to newer second-hand vehicles, they consider the age of the vehicle, its Euro standard, mileage, and general quality together with its cost.
- A few drivers commented they were considering moving to leasing a vehicle instead of owning one to avoid charges and to avoid the risk of a large outlay in the current cost of living crisis.
- One private hire vehicle operator said they were considering either
 - Upgrading only a small percentage of their fleet to be compliant due to limited finances; or
 - To move to an owner/driver fleet and not owning their own vehicles.

“we’ve actually considered not upgrading the vehicles and just going to driver only. The other option is upgrading a very small percentage of them” (PHV operator)

Running costs: (45% considered this a factor in the survey)

For some, the current and future economic climate and the current and future state of the Taxi industry are also influencing factors, including rising costs of living, fuel costs, and many feeling they are still recovering from the impact of COVID-19 on their business and livelihood. Many discussed how they felt there was much “uncertainty” in the industry and how they therefore did not want to invest in a new vehicle as a result.

“Covid has been a big one ... people would normally go to work, they’re not working, going to the office, not commuting as much, so that’s had a bearing on the economy, on the industry” (hackney carriage driver)

“It’s all to do with finance and how the work is after Covid, because the taxi industry is still suffering, it’s not back to 100% as it was ... it just depends on a series of factors” (hackney carriage driver)

Other trading conditions over the past 12 months: Evidence from the in-depth interviews

- Taxi drivers and operators commented on how the uncertainty surrounding the CAP and funding is influencing / will influence their decision when looking to renew or upgrade their vehicle/s, with many deciding to delay upgrading until a decision was made about the CAP and the information was confirmed and clarified.

“a lot of drivers haven’t upgraded their own vehicles either, because they’ve been waiting for a funding pot to become available” (PHV operator)
- Some taxi drivers discussed how they had already upgraded their vehicle/s since the CAP was announced due to not knowing if and when the charges would come into effect.

“I did hear that there was going to be a clean air zone similar to the one in London and that sort of pushed me towards, it was one of the factors that pushed me towards getting the electric taxi” (hackney carriage driver)
- Because of concerns about the Clean Air Zone being implemented in Greater Manchester and the awareness of other areas implementing similar schemes such as Bradford, Birmingham, and London, some taxi drivers said they wanted to upgrade to compliant vehicles to avoid the charges in these other areas whether they are introduced in Greater Manchester or not.
- Some renewed vehicles in their fleet after as little as 3 years to keep their vehicles “up to date” and “new” for their customers. Most commented that their typical renewal period has widened over the last 12 months due to the vehicle market and the uncertainty surrounding the CAP and compliance standards.

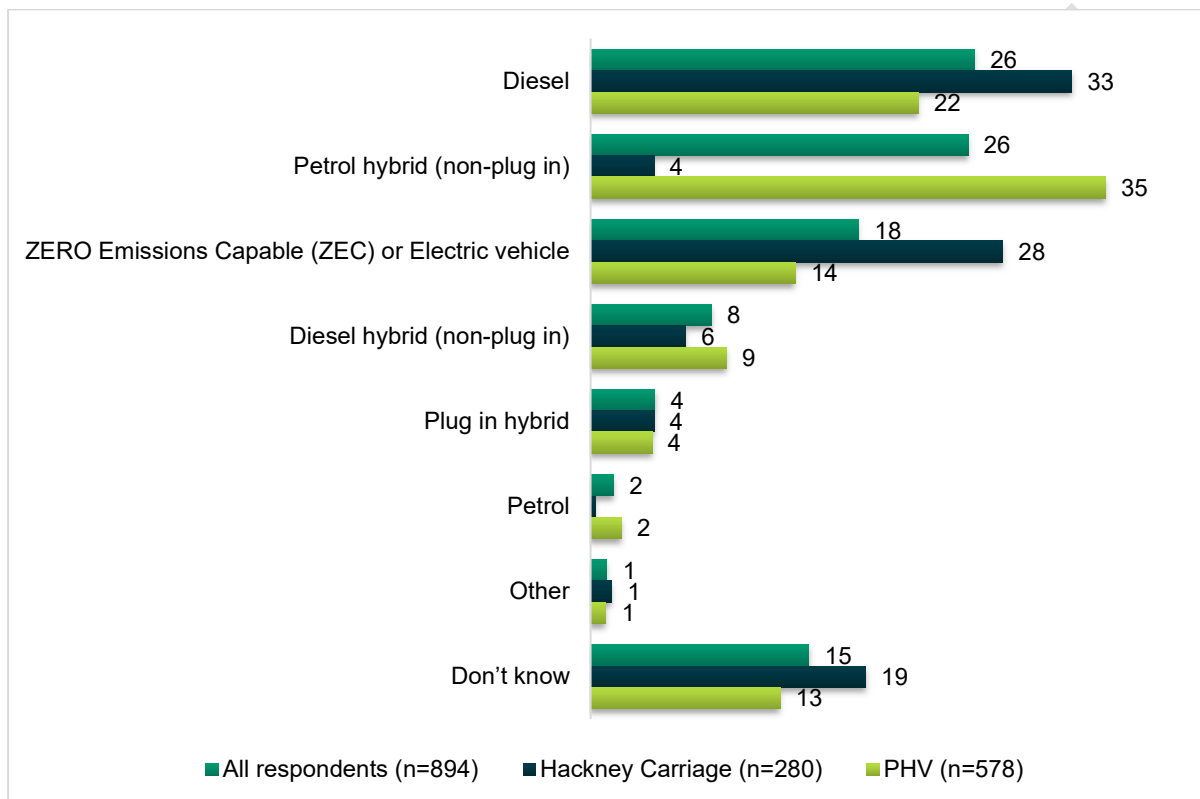
3.2.3 Electric vehicles and fuel choice

Vehicle purchase: Preferred fuel for next vehicle purchase

When asked about the type of fuel that the next vehicle purchased would run on, most respondents stated diesel (26%) and petrol hybrid (26%).

- 33% of hackney carriage drivers said they would replace their next vehicle with diesel and 28% with an electric vehicle; and
- 35% of private hire vehicle drivers said they would replace their next vehicle with petrol hybrid (non-plug in),

Figure 3.4 Fuel choice for next vehicle purchased (%)



Base: 894 (All respondents excluding those who responded from taxi trade organisations)

Survey respondents explained the reasons for their selection and the most common themes that were mentioned are shown for the three main types of fuel selected.

Table 3.3 Main reasons why each type of fuel was selected (number of comments)

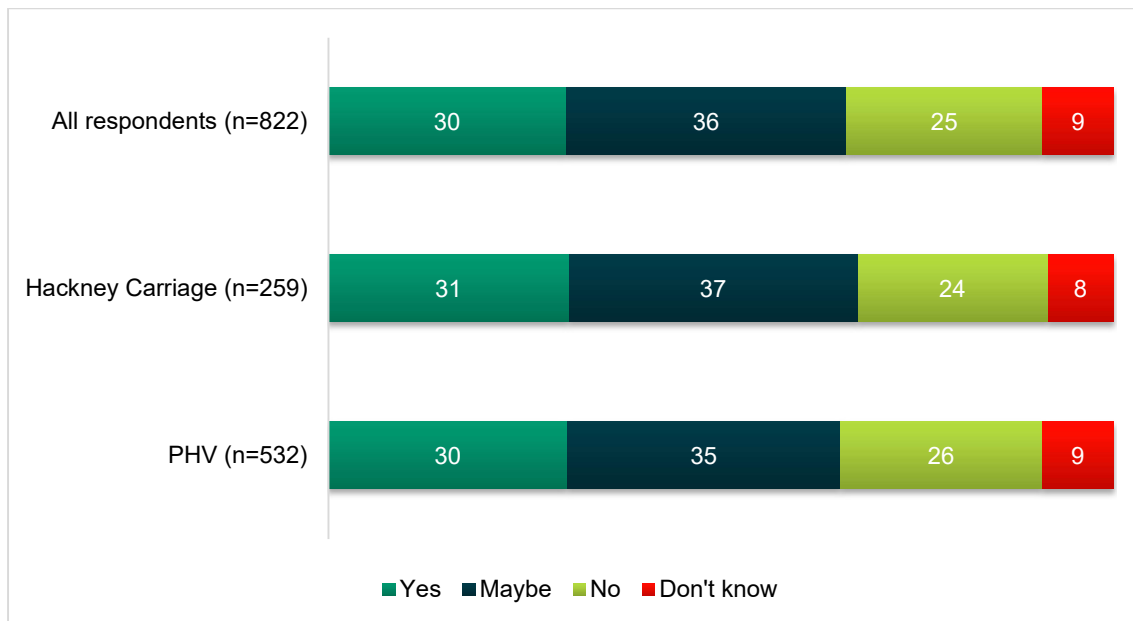
Reason for selecting fuel type	Electric	Petrol hybrid	Diesel
Most economical / cost effective	10	29	40
More affordable / cost / cheapest	4	20	30
Chosen despite EVs cost EVs too expensive / not affordable	5	13	34
Most environmentally friendly	20	17	4
Reliability	0	8	27
Mileage range is important	0	11	17
EV charging infrastructure limited	3	12	8
Limited choice	3	1	7
Not efficient waiting for an EV to charge	0	8	7
Compliance with clean air zones	10	4	1
Familiar with car / it's a good car	3	9	2
Hybrid cars are economical	0	11	0
Total who chose each fuel type* *some respondents did not comment	162	228	232

3.2.4 Electric vehicles future choice

All taxi owners, operators and drivers were asked about their current use of electric vehicles (n=894), 8% of these respondents currently use electric vehicle. There was no specific taxi type which dominated this, similarly there was an even mix of operator, owner-drivers and driver only (track) who had electric vehicles.

Of the remaining 92% of respondents who did not own or drive an electric vehicle, 66% said they would (30%), or maybe would (36%), consider buying or leasing an electric vehicle in the future. The outcomes were very similar for hackney carriage and private hire vehicles (68% and 65% respectively).

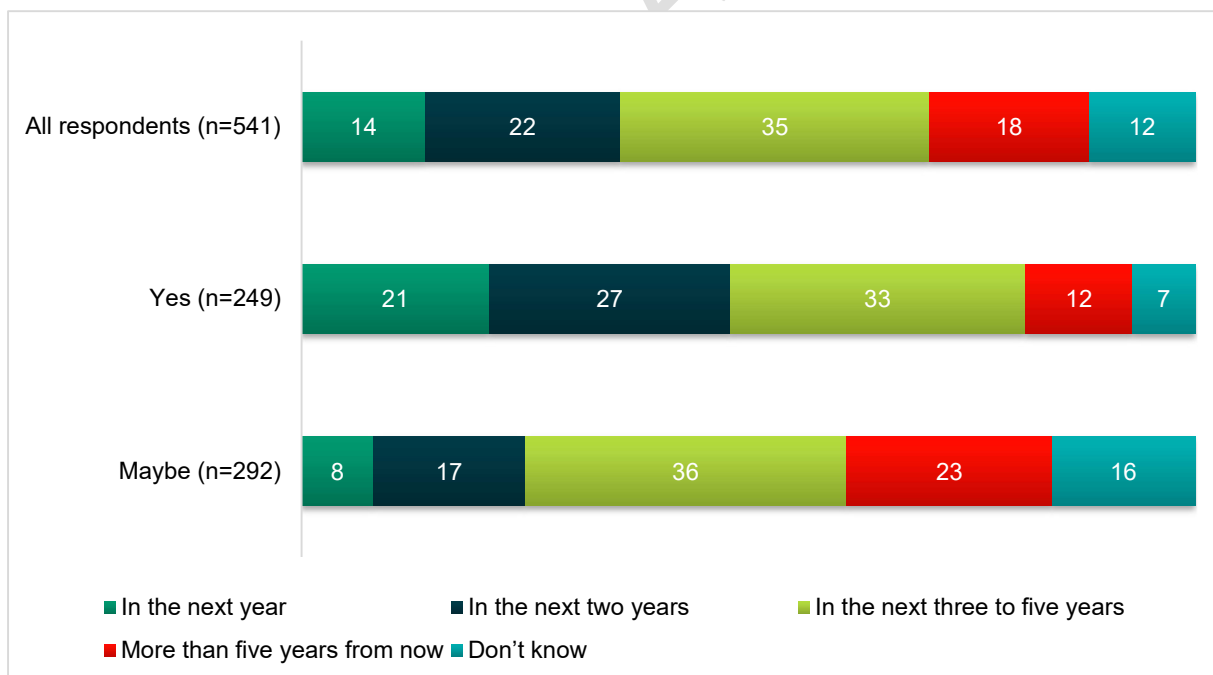
Figure 3.5 Would consider buying an electric vehicle (%)



Base: 822 respondents who do not currently own an electric vehicle

A little over a third of drivers (36%) would consider buying electric in the next two years while 18% felt this would be more than five years from now. The timings were the same for both hackney carriage and private hire vehicle respondents.

Figure 3.6 How soon would an electric vehicle be considered (%)



Base: 541 respondents who would or maybe would consider buying an electric vehicle in the future

The main ways the 541 survey respondents who would or may purchase an electric vehicle in the future could be encouraged to do so are mainly financial and availability of charging points:

Financial considerations:

- 75%: if they were cheaper to buy;
- 57%: if there was a financial incentive to use electric vehicles; and

- 46%: if they were cheap to run and maintain.

Charging points:

- 39%: if there were more taxi specific points;
- 36%: if there were more publicly available points; and
- 35%: if they could charge at home.

Electric vehicles (EV) future choice: Evidence from the in-depth interviews

Financial considerations

- Many commented on the cost of EVs, stating that, if EVs were more affordable they would be encouraged to upgrade. Comments related to the lack of, and uncertainty of funding, with most adding that if substantial funding was available to contribute to the purchase of an EV then they would use it to upgrade.

“the manufacturer needs to work with the councils and the Government and get the pricing structure correct, because at this moment in time an electric V Class for the work I do, it’s virtually double the price of a diesel or a petrol” (PHV driver)

“personally myself I’m not going to buy any electric cars until I know what sort of funding the council are going to give us to support us buying these vehicles, because they’re not cheap” (PHV operator)

Charging points and other infrastructure:

- **The lack of charging infrastructure and charging wait times** is a significant barrier to drivers and operators, feeling that the lack of available charging stations along with charging wait times were impractical and not viable in the Taxi industry. Those who mentioned this felt they’d be encouraged if concerns over battery life were addressed and wanted to see **battery guarantees** to ensure the best performance and battery life

“possibly the future, but at the moment the infrastructure’s not there for taxis and certainly not in this area, charging points and things like that, they just wouldn’t be able to do the mileage that they would need to do, so we don’t have a single full electric car on the fleet yet. We’ve got lots and lots of hybrids but no full electrics and I think the consensus really is that the infrastructure for the electric vehicles isn’t up to scratch, it wouldn’t suit a taxi” (PHV operator)

“don’t forget, while you’re charging that car for forty-five minutes, an hour, it’s costing you an hour’s pay” (PHV driver)

- The improvements to EV infrastructure wanted included a significant **increase in the quantity of charging points and the location of these charging points**, such as more charging points located across all ten Local Authorities as some felt most Greater Manchester’s charging points were located in Manchester City Centre.

“I can’t see it going electric myself, I don’t think there’s enough electric points for all the taxis in Manchester” (PHV driver)

- For many, considering EVs in the future was dependent on vehicle capabilities, including range capabilities, improved charging times, longevity and wheelchair accessible capabilities (to note 92% of hackney carriage drivers who responded to the survey had a wheelchair accessible vehicle).

“... the reason why we haven’t gone down that route [buying an electric TX] is they don’t cover our work and when I say our work, I mean our disabled access work ... the electric TX doesn’t comply with what we need it for” (hackney carriage driver)

Additional, possible supplementary benefit to owning an electric vehicle:

- A few hackney carriage drivers felt that having an EV could be a selling point to attract customers.

“I can advertise as a business, as an advantage of my business, so I can say I used the latest electric taxi ... if they are environmentally conscious then their tourism isn't negatively affecting the area that they're being tourists in” (hackney carriage driver)

- Other drivers, particularly private hire vehicles felt customers put more importance on cost, cleanliness and the quality of the vehicle.

Other ways to encourage owners to purchase an electric vehicle:

- Many said they would be encouraged if future EV models were improved to
 - increase range capabilities to reduce without range anxiety;
 - quicker charging times to reduce the impact of charging on operation hours;
 - once electric vehicles were proven, regarding the life expectancy, battery life and reliability.
 - There were more options for electric black cabs (hackney carriage).

“I've heard a lot of people complaining, even with new electric vehicles that they've just purchased now that they can't put the air conditioning on because it drains the batteries. Everything in the vehicle takes the mileage off the vehicle at the end of the day, so you'd be forever charging them and the way things are going at the moment the price of charging them is going to escalate” (PHV driver)

3.3 Clean Air Plan: In-depth interviews

3.3.1 Awareness of the Clean Air Plan

All respondents were aware of the previous CAP and the majority knew it was then put on hold but were unaware of the new investment-led approach and that daily charges are proposed to be dropped subject to government feedback, which was explained to respondents. A few were aware of the new proposed CAP as they had seen communications or heard the proposed plans via word of mouth.

There were mixed opinions about the need for a CAP in Greater Manchester and the impact it would have.

- Some supported the need for improved air quality in Greater Manchester, with two commenting that they supported having a charge as in the original CAP;
- Others commented that improving air quality in Greater Manchester is not as necessary as it is in other areas which have far worse air quality, such as London; and
- Some added that the CAP targeted the wrong source of pollution as the targeted vehicles are not a key contributor to air quality issues, and that there are greater issues that need addressing such as Greater Manchester's road infrastructure.

3.3.2 Views on new proposed Clean Air Plan

Overview

- **Most supported an investment-led approach**, thinking it was a good idea; however commented that it was all dependent on the funding available. Many were cynical that a charge would still be introduced in the future and struggled to accept the new proposed plan would not include charges now or in the future.

“It depends what the financial support is” (PHV operator)

“obviously we need some clarification on is that a temporary thing? ... Is it six months, one year, ten years? (PHV operator)

- **Most felt they would delay upgrading their vehicle** for as long as possible until there is more clarity about the CAP, but would have upgraded sooner if the charges were

introduced. A widely held view was the lack of information in general had an impact on drivers and operators replacing their vehicles.

The positives and negatives of the proposed GM CAP policy and its impact

- All respondents said that the new plan to drop the charge would be beneficial for their business as they will no longer have to pay the daily charge or have to pass the cost onto their customers. Some respondents supported dropping the charge as it allowed them to upgrade when they are ready without the pressure of feeling it is being forced upon them.

“In the old proposals it was a bit ridiculous in my view, not just for us, for the buses and the HGVs, the amount of money the proposal would charge them, it would have put a lot of people out of business” (hackney carriage driver)

“People that have got a Euro 5 will hold onto the Euro 5, they’re not in any rush, they can go through a transition accordingly on the model that they’ve been using” (hackney carriage driver)

- Many felt removing the pressure of the daily charge would reduce the number of people upgrading to a compliant vehicle as the pressure to upgrade is no longer present and therefore the new CAP is less likely to achieve the aims of improving air quality in Greater Manchester.

“to remove the charges ... it’s not going to do anything for Greater Manchester clean air, because your air’s never going to get clean, because people will still be driving Euro 4, Euro 5 vehicles on whatever road they want” (hackney carriage driver)

NOTE: Survey data shows that approximately 1 in 4 hackney carriage drivers and 1 in 3 private hire vehicle drivers plan to change their vehicle in the next two years.

- Some commented that the work already done on the previous CAP including installing cameras and signage has been a “waste of time” and resources now that the plans have been changed. One driver questioned how the money spent to date would be recouped.

“people have been in uproar saying what’s it worth charging for all those cameras and signage, after two years it’s a waste of money” (hackney carriage driver)

3.3.3 Funding a replacement vehicle

Respondents were shown the proposed Clean Taxi Fund for the previous Category C charging CAZ agreed in 2021 as shown below. Information included the proposed replacement grants, retrofit grants, vehicle financing options and the proposed eligibility and vehicle cap.

Measure	Hackney/PHV
Replacement grant	£5k – compliant WAV Up to £10k –new ZEC WAV (running costs) £10k – second-hand ZEC WAV £3k – compliant non-WAV £6k – new ZEC non-WAV (running costs) £6k – second-hand ZEC non-WAV £5k – minibus
Retrofit grant	Up to £5k
Vehicle Finance	Up to £5k – compliant WAV Up to £10k – new or second-hand ZEC WAV Up to £3k – compliant non-WAV Up to £6k– new or second-hand ZEC non-WAV
Eligibility & Vehicle cap	GM-licensed, 5 vehicles (Tranche 1: limited to 1 vehicle)

- Generally, all respondents supported the idea of funding but felt that the funding offered in the Clean Taxi Fund was not high enough. Both hackney carriage and private hire vehicle drivers and operators were concerned that the proposed funding would not make a significant enough contribution to enable some to upgrade to a new or second-hand vehicle.

“I mean on first look it looks pretty decent, doesn’t it, but don’t forget that won’t buy you a new car anyway. ... It sounds a lot, but in the current market that won’t get you much” (PHV driver)

Three quarters (77%) of respondents stated they would consider applying for funding and 16% who did not know (7% would not apply).

- But the majority said they needed **more clarity surrounding the funding**, including when it would become available, the type of vehicle it is available for, how it applies to both new and second-hand markets, the application process, the process for repaying loans and clarification on the term ‘up to’ which is used to explain the funding amounts,.

“I think we need decision making and we need to put something in place sooner rather than later, we’ve already been waiting a very long time for decisions to be made ... businesses are already suffering and everybody’s on hold waiting for decisions ... you don’t want to go and spend £8,000 on a new vehicle to be told in six months to twelve months time that if you’d have held on you would have been given £3,000” (PHV operator)

Views on a replacement grant

Nearly all respondents supported the concept of a replacement grant but felt the grant amounts were not substantial enough and “could always be higher”. Hackney carriage drivers in particular felt the funding proposed is not enough to help cover the cost of an electric TX5 which costs around £73,000.

“Well, to be honest with you, five grand for the top one there, your compliant vehicle for your wheelchair access, that’s way too low, because your market’s just shot up five grand” (hackney carriage driver)

Views on a retrofit grant

Not all had considered retrofitting their vehicle/s before and therefore did not know if the funding would be enough to help them retrofit.

- Some believed retrofitting could be a good alternative to upgrading and it’d allow them to keep their vehicle/s for a longer period of time.
- Others said that given the age limits due to licensing standards on private hire vehicles and hackney carriages this would not be a worthwhile or attractive option.

“having a newer, compliant vehicle would make more sense than retrofitting your old vehicle, because you’re only allowed to keep your old vehicle so long anyway ... so why would you waste the money on retrofitting it” (hackney carriage driver)

- Some considered retrofitting to only be a “temporary fix” and that the rest of the vehicle would remain the same, therefore making this a less attractive option unless the full cost of retrofitting was covered.

“you’re better off buying a new one, there’s no money in it, there’s no longevity in it” (PHV driver)

Views on vehicle finance

Survey data showed that half the respondents would use finance, and 66% expected they would borrow money to purchase their next vehicle with 8% saying they would purchase the vehicle outright.

- Some respondents did voice concerns with using finance as it was seen as an additional monthly cost which would be unaffordable.

“it all goes on monthly payments with me ... it’s all right saying £10,000, but it’s like how much is that going to affect me weekly, I’ve got all my bills to pay in the house, I’ve got mortgage to pay, everything else on top and that’s another bill I can do without, a new car” (PHV driver)

- Some highlighted that being in the Taxi industry is not always a long-term plan and so being committed to a loan is not a practical option.
- A couple of respondents commented that having a loan in addition to a grant may help financially as it’d increase the overall amount contributing to upgrading their vehicle/s.
- Some respondents discussed how they felt more consideration should be given to drivers with poor credit records / scores as they believe they will face issues securing finance agreements for upgrading.

“if you’re going to offer a grant towards a new vehicle ... they need to also help with the people who can’t get finance. The government needs to step in and say, all right, these people here, he can’t really get finance, he’s never had finance, he’s never had a credit record in his life” (PHV driver)

Eligibility and vehicle cap

- Some respondents understood why there was a vehicle cap and supported it as they felt larger companies with more than 5 vehicles were more likely to be able to afford to upgrade on their own;

“I’m not saying it needs to fund every vehicle a company owns, but they need to give them a limit and that company can decide whether they invest in new vehicles with the funding or second-hand vehicles with the funding ... the funding needs to be there before we go and process vehicles” (hackney carriage driver)

- However, some private hire vehicle drivers and operators felt it was unfair to restrict the number of vehicles that could receive funding for, feeling it penalised those who have larger fleets, and the cap is at cross purposes with the aim to improve air quality; and
- A few felt that those who have already upgraded since the CAP was announced should be eligible for financial support as they may have upgraded due to concerns about the charges whereas others have waited, and they felt it would be unfair to only provide funding to those who waited.

Would the funding encourage vehicle grades / retrofitting

- Some felt if they were going to upgrade and the funding was available then they would use it and feel that the funding would be a “bonus”, but the funding would not encourage them to upgrade or retrofit earlier than planned.

“if you’re not planning on upgrading anyway, I don’t think it’s an incentive to upgrade a vehicle yourself, however much money more, if you don’t really need to” (PHV operator)

- Many felt the funding offered needed to be more substantial to encourage them to upgrade their vehicles earlier than planned. Some commented that Taxi drivers live “hand to mouth” and therefore unless funding was significantly higher, they felt many would delay upgrading their vehicles for as long as possible.

“they want us to have these cars and people want to have them, but the fact of them actually being able to financially buy one, a lot of people struggle with ... there’s a lot of people that are borderline ... I know people that drive a taxi that live hand to mouth” (PHV driver)

The type of funding they’d use and which vehicle/s they’d upgrade to

- The majority would prefer to use the replacement grants over loans to upgrade their vehicle/s. The majority felt the retrofit grant would only deliver a single solution for emissions, while the replacement grant will enable them to enjoy benefits of a new or newer vehicle;
- Some would be interested in upgrading to an EV but felt the funding was not enough, this was a particular concern for hackney carriage drivers; and
- Others mentioned that upgrading to a second-hand compliant vehicle using funding would be an attractive option.

Views on targeting funding

- Many felt that funding should only be available to those licensed in Greater Manchester.

“if you’re going to bring funding in because you want clean air in Greater Manchester, then it’s got to be a Greater Manchester licensed vehicle ... You can’t go chucking funding out to somebody who’s licensed in Wolverhampton or licensed in Sefton or Burnley or wherever they’re licensed ... they might only come into a city centre once, but they’re getting five grand to do that, so that funding should be available just with ten authorities only” (hackney carriage driver)

- Some felt funding should be targeted at drivers rather than businesses as they are more likely to need more financial support when compared to larger businesses.
- Overall people want the funding to be fair with everyone having an equal opportunity to apply for funding whilst a few suggested funding should be targeted first at those with the oldest and most polluting vehicles.

“I’m looking from a clean air point of view ... probably the worst polluting vehicles first” (PHV operator)

Views on compliance standards

- Several felt compliance standards should not be based on the age of a vehicle, and should instead follow the natural process, only upgrading a vehicle when it reaches the end of its life instead of enforcing requirements based on Euro standards.

“I know over a certain timescale, through natural wastage, anything older is going to disappear ... natural wastage will solve the problem anyway” (PHV driver)

- Many were concerned that compliance standards will continue to change and therefore they would need to keep changing their vehicles as the ‘goal posts’ move, this is causing uncertainty for some and therefore a reluctance to upgrade.

3.3.4 Other measures / suggestions to encourage upgrading

- A private hire vehicle operator and a hackney carriage driver suggested that a **charge within the inner relief road** could be a positive way to encourage upgrading to compliant vehicles for all vehicles including private car drivers, suggesting that money raised from these charges could be put towards more substantial funding to encourage upgrades and retrofitting.

“if you had a charge just on the inner ring road and once you’ve gone into that inner ring road you’d be charged, no matter what vehicle you had” (hackney carriage driver)

- Some suggested that **increasing the age limit** for how long taxis can be used for would encourage them to upgrade as it means they could upgrade knowing they’d have that vehicle for a substantial amount of time and therefore the cost would be worth it.
- Many commented that more information and accessible information could be communicated about the **impact of poor air quality** and benefits of upgrading.

“I don’t think it is enough to make us switch to hybrid vehicles, but again it all comes down to accessibility and availability. There’s not enough on the market at the moment” (PHV operator)

- Some drivers commented they needed **confidence that the goalposts would not move** in a few years’ time and what is classed as compliant may change.

“At the moment I’ll stick with what I’ve got, because another thing is everybody’s unsure about what’s happening ... Nobody seems to know what’s happening” (PHV driver)

Taxi drivers from the survey made similar suggestions provided in the in-depth interviews as shown in Table 3.2.

Table 3.4 Other suggestions to encourage vehicle owners to upgrade to cleaner vehicles (number of comments)

Headline theme	Suggestion	Number of comments
Financial incentives	Financial incentive / higher grants	123
	Reduce cost of buying electric vehicles / maintenance costs	76
	Interest free loans	13
Electric Vehicle (EV) infrastructure	More charging points	24
	Reduce range anxiety	17
Other comments provided	Stop non-GM licenced taxis working in Greater Manchester	14
	Increase the choice of vehicles	13
	Change taxi minimum licence standards	9
	Allow more time to upgrade / retrofit	4
	Council could lease new cars	3
Total number of comments provided		296

3.4 Minimum Licensing Standards

The Minimum Licensing Standards (MLS) are a set of consistent standards for taxi and private hire licensing in Greater Manchester. Rollout of the MLS is to be delivered in two stages. Stage 1 has been agreed, whereas Stage 2 is yet to be agreed by all 10 GM LAs. For more information visit <https://www.gmtaxistandards.com/>

Licensing standards: (37% considered this a factor in the survey)

- Most drivers and operators explained they tend to renew their vehicle/s in line with their licensed authorities' regulations.

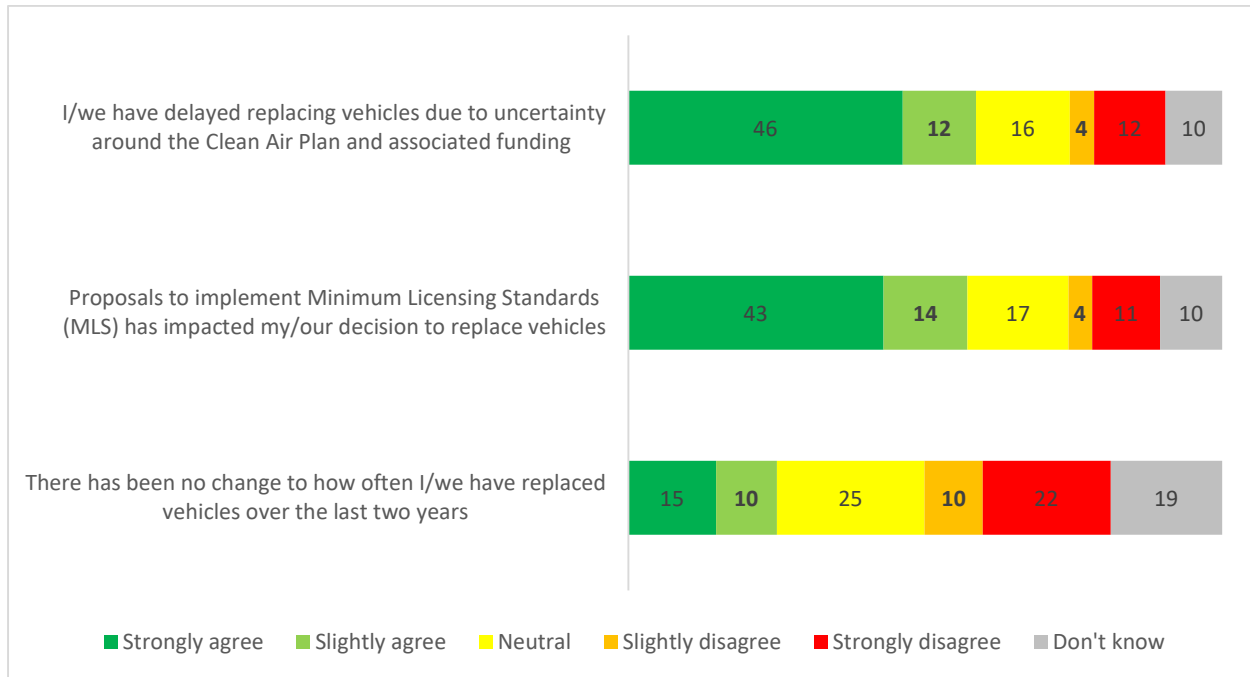
"they all come to the end of life, I mean with our licensing authority the vehicles at the moment can be up to ten years old and then they need to come off anyway, because they can no longer be plated after that" (PHV operator)

"We normally change them every three years/four is about the max ... it's just a natural progression for us, because like I said, you know, we operate in the highest sector of the market of transportation, so clients are very wary of new products" (PHV driver)

Over half of survey respondents had delayed replacing vehicles to uncertainty with the CAP and funding and similarly Minimum Licensing Standards had impacted when vehicles would be replaced (58% and 57% respectively). A quarter stated they haven't changed how they replaced vehicles their vehicles over the last two years, however a third of respondents (32%) disagreed and felt they had changed.

There was very little difference in response between hackney carriage and private hire vehicle drivers or operators.

Figure 3.7 Attitudes to replacing vehicles based on trading conditions over the last two years (%)



Base: 894 (All respondents excluding those who responded from taxi trade organisations)

- Some suggested that taxi licensing standards need to be consistent across all of Greater Manchester’s 10 local authorities.

“I would think the way forward is to standardise the whole of Greater Manchester, stop private hire, stop hackney, just make it all as one and then just say to people if you want to work in Greater Manchester you’ll have to have such a vehicle” (PHV driver)

4. Findings: HGVs and specialist HGVs

4.1 Introduction

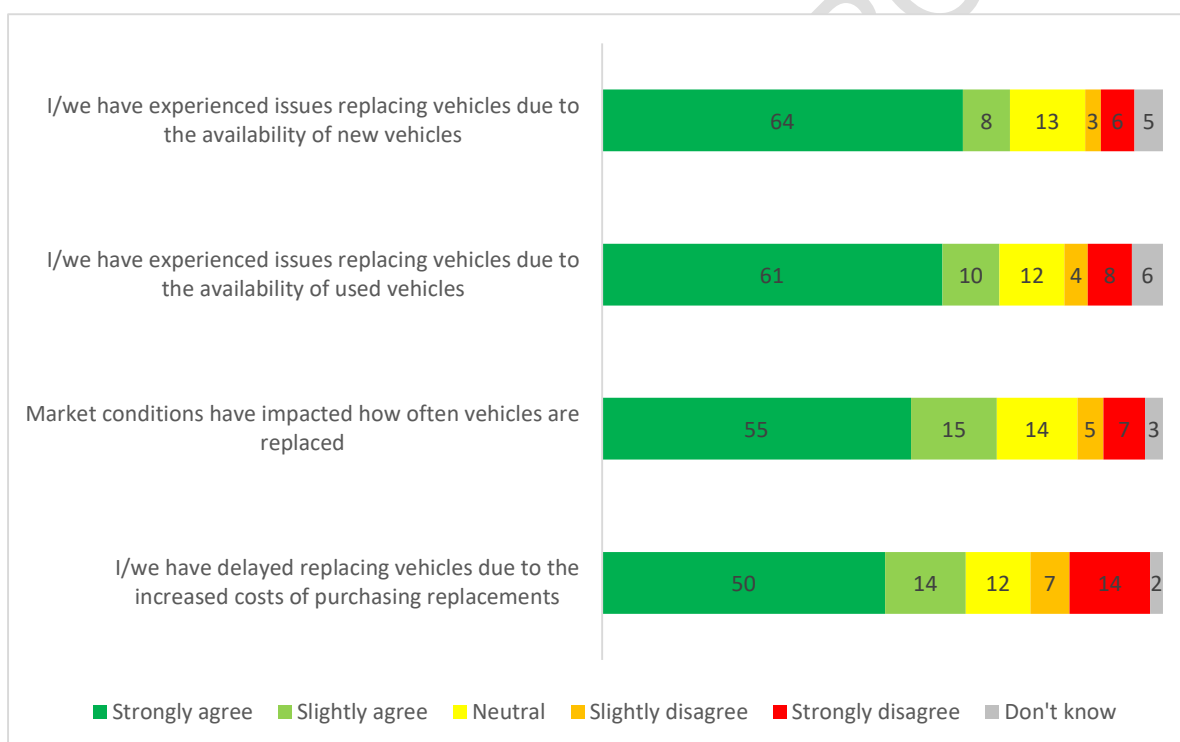
In this section the findings from the HGV and Specialist HGV survey are shown with supplementary detail delivered by the in-depth interviews. Most of the questions about vehicle purchasing were only asked to those who own an HGV therefore, 28 organisations did not answer some questions.

4.2 Replacing vehicles

4.2.1 Trading conditions over the past two years

Almost three quarters (72%) had experienced issues replacing vehicles due to the availability of new vehicles. The availability of used vehicles (71%) and market conditions (70%) have all impacted respondents' ability to purchase new vehicles, with nearly two-thirds (64%) having delayed replacing vehicles due to increased costs.

Figure 4.1 How Trading Conditions Have Impacted Vehicle Purchase (%)



Base: 216 respondents: HGV and specialist HGV businesses were asked these questions

Additional findings:

Non-compliant vehicle owners were more likely to have delayed replacing vehicles due to increased costs and experienced issues replacing vehicles due to availability of used vehicles (79% and 72%) than those who own compliant vehicles (55% and 48%).

Trading conditions: Evidence from the in-depth interviews

Market conditions

All respondents in the in-depth interviews felt that the past 12 months have been difficult in terms of trading conditions and considering upgrading their vehicles, as well as the past few years. The main reasons given for this were

- The announcement of the GM CAP;

- The impacts of COVID-19;
- Rising fuel prices; and
- General increases to the cost of living.

“It’s been very difficult because we’ve been forced into upgrading, even though there was nothing wrong with them, because of what was coming in and has now been postponed” (HGV Business)

“We were planning on upgrading before Covid, but obviously Covid came ... everyone was a bit unaware of what it was going to be like after Covid and it was quite soon that we realised that it just quietened a lot and so therefore the plan for reinvesting into the company to get new vehicles was put on the backburner” (HGV business)

Price increases and vehicle availability

- Most felt the prices of compliant HGVs have increased for both new and second-hand in recent years, with a few believing the announcement of the GM CAP has caused prices to rise whilst the cost of Euro 5 and other non-compliant vehicles has reduced.

“Everything’s really expensive, so all the prices are flying up, so I think a lot of it is because of the clean air plan” (HGV business)

- The availability of compliant HGVs was also considered to be a key issue by many, and some felt that this will become worse and there will not be enough compliant HGVs for all businesses to upgrade to, adding that the waiting time for new HGVs to be built can be 18 months or longer, some are concerned that this will increase if demand also increases.

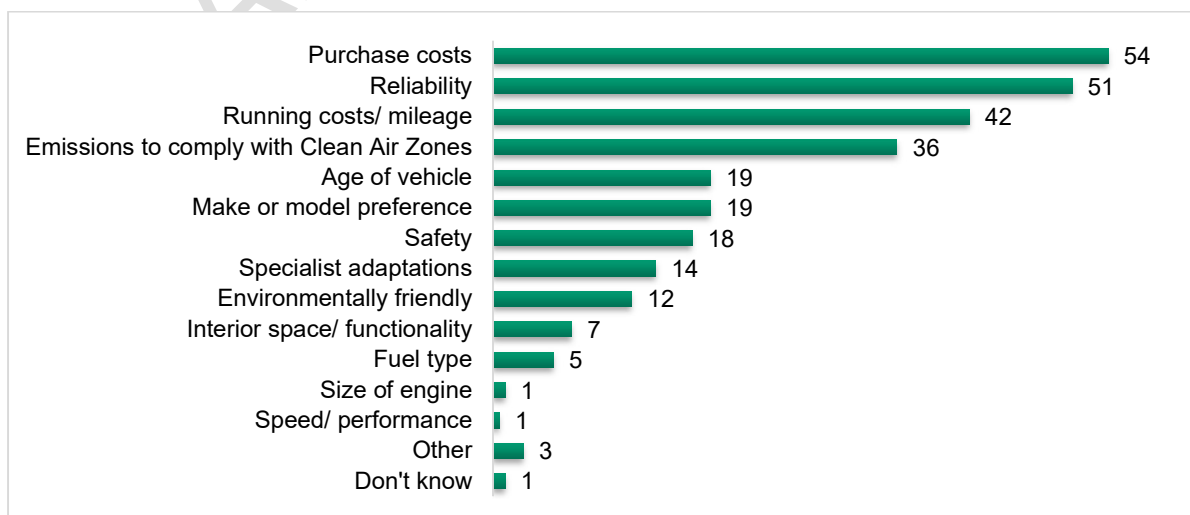
“We actually ordered one that we got in March and we were waiting eighteen months for it. ... it’s been an ongoing issue and we’ve found quite a lot of the stuff that we buy in ... the components for some of the machines that we have, that we import ... we’ve had to wait a lot longer than expected” (HGV business)

4.2.2 Vehicle purchase

Most important factors when purchasing a vehicle: All respondents

HGV respondents were asked to select the three most important factors when purchasing a vehicle. Purchase costs and reliability are seen to be the most important factors with just over half the respondents selecting these two. Around one-fifth (23%) of respondents did not select either cost as one of their most important factors and they felt vehicle emissions would comply, reliability and make or model preference were important.

Figure 4.2 Most Important Factors When Purchasing an HGV (%)



Base: 188 respondents: specialist HGV drivers were not asked this question, respondents could choose more than one answer

Additional findings:

- HGV businesses with at least one non-compliant vehicle were more likely to consider reliability an important factor compared with those who had a compliant HGV (57% and 37% respectively); and
- HGV businesses with compliant vehicles considered low emissions to comply with clean air zones across the UK to be important compared to those with at least one non-compliant HGV (46% and 30% respectively).

Vehicle purchase factors: Evidence from the in-depth interviews

The findings from the qualitative discussion reflects the outcomes from the survey.

- Many said they can only afford to look at second-hand HGVs when looking to upgrade. When they do, the main things they take into consideration are:
 - Cost of a vehicle;
 - Age;
 - Euro standard;
 - Mileage;
 - Engine;
 - Body work; and
 - General quality and suitability of the vehicle for their needs.

“We’ve looked at the second-hand market for compliant vehicles ... The second-hand car price market has gone through the roof ... You’re still looking at 170-180 grand, something that’s between eighteen month and two and a half year old” (HGV business)

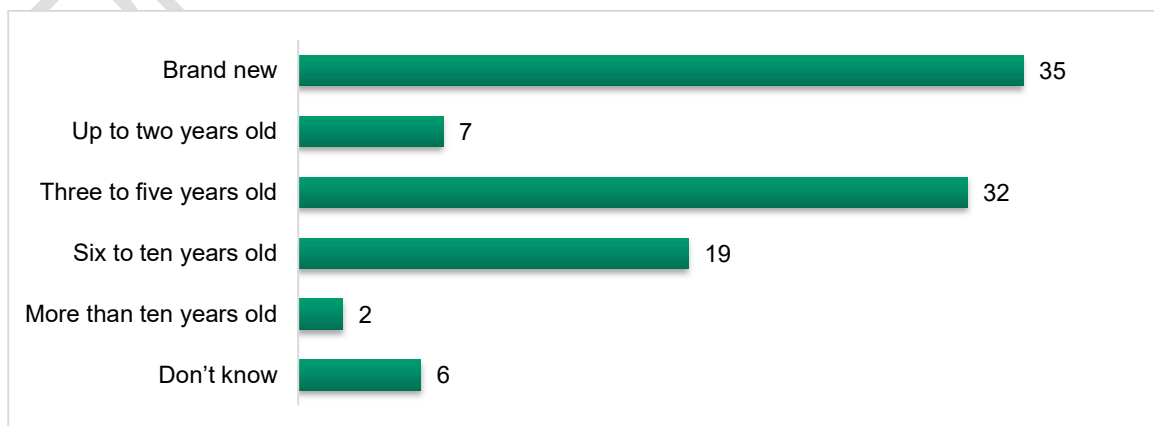
“Let’s say I want to go out and buy fifteen brand new machines it would cost me 2.25 million today. That’s what it would cost ... we might try and get a few brand new and then maybe get the rest (second-hand) that are all pretty much Euro 6 compliant” (HGV business)

Vehicle age: All HGV respondents

All in-depth interview respondents said they would prefer to purchase new vehicles, but many stated they cannot afford them and this was reflected in the survey data.

About a third (35%) of HGV businesses would buy brand new vehicles and a further 32% a vehicle between three and five years old. Medium and larger businesses were more likely to buy brand new than sole traders, who were more likely to buy vehicles between 3 and 10 years old than brand new.

Figure 4.3 Likely age of next vehicle purchased (%)



Base: 188 respondents: specialist HGV drivers were not asked this question

Vehicle age: Evidence from the in-depth interviews

- There was a mix of respondents who either typically renew their HGVs every 5-10 years, while others use their HGVs for as long as they can and will only upgrade when “absolutely necessary”.

“you don’t tend to upgrade them unless it’s absolutely necessary ... they have the twelve week inspections ... they’ve got to be fit for purpose, they’ve got to be fit for the road. So, when you’re looking after them every twelve weeks like that, then they don’t really need to be upgraded unless there’s a crash or it’s stolen” (HGV business)

- Some are aiming to adopt a cycle of upgrading their HGVs every 3-5 years, though COVID-19 and financial market conditions as well as driver shortages has impacted their plans.

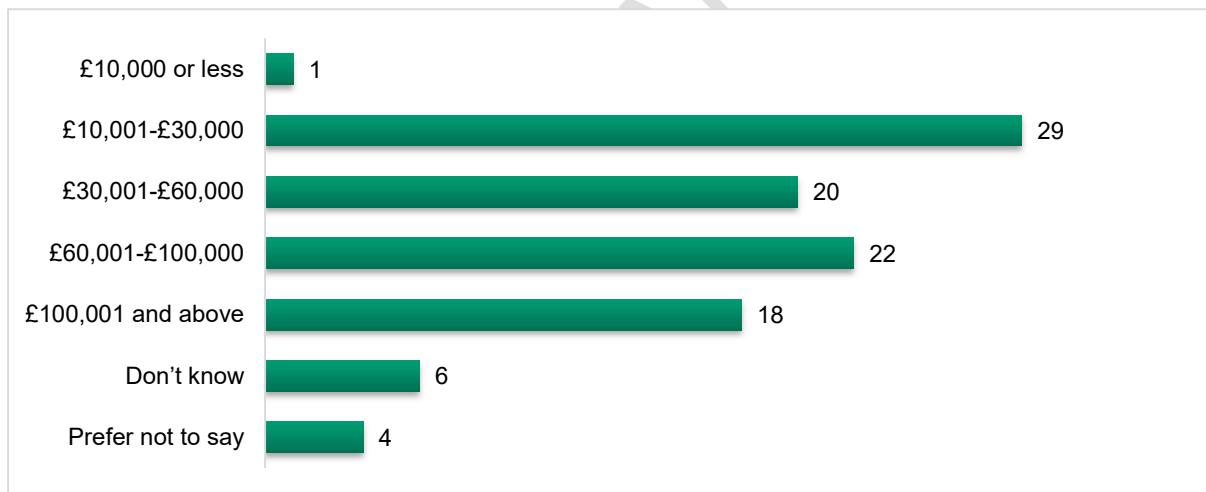
“I’ve tried putting it forward that we replace our vehicles every four years ... It’s not happened as of yet, we have started looking at replacing them more often, but we have kept our vehicles a little bit too longer than what we should” (HGV business)

- Other respondents said regardless of what is decided with CAP, they are still aiming to upgrade their non-compliant vehicles within the next 3-5 years for their own business reasons and for lower environmental impacts.

Vehicle price: All HGV respondents

Figure 4.4 shows that about half the respondents have a target price between £10,001 and £60,000. Similar to the vehicle age, the price of the vehicle is dependent on business size with larger businesses expecting to pay the higher price.

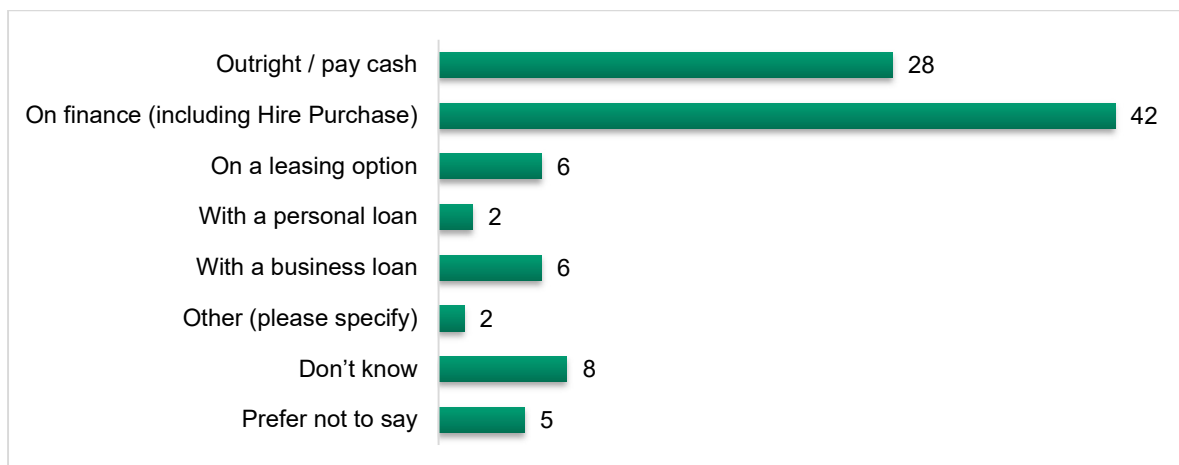
Figure 4.4 Target Price of next HGV (%)



Base: 188 respondents: specialist HGV drivers were not asked this question

Vehicle payment: All HGV respondents

Figure 4.5 shows that two-fifths (42%) of HGV respondents will pay for their next vehicle using finance, and close to one-third (28%) will pay outright. 55% of those who own a non-compliant HGV, would use a finance option (e.g. loan, lease or hire purchase) to purchase their next vehicle and 31% would purchase their vehicle outright.

Figure 4.5 How the next HGV will be paid for (%)

Base: 188 respondents: specialist HGV drivers were not asked this question

Vehicle Fuel type: All HGV respondents

From the survey, 97% of respondents would purchase a diesel HGV when they next buy a vehicle. Their main reasons they provided for this are:

- There do not believe there are any other viable alternatives;
- Diesel is the most cost-effective and practical choice; and
- Electric and hydrogen powered vehicles were not thought to be an option considering what HGVs need to carry.

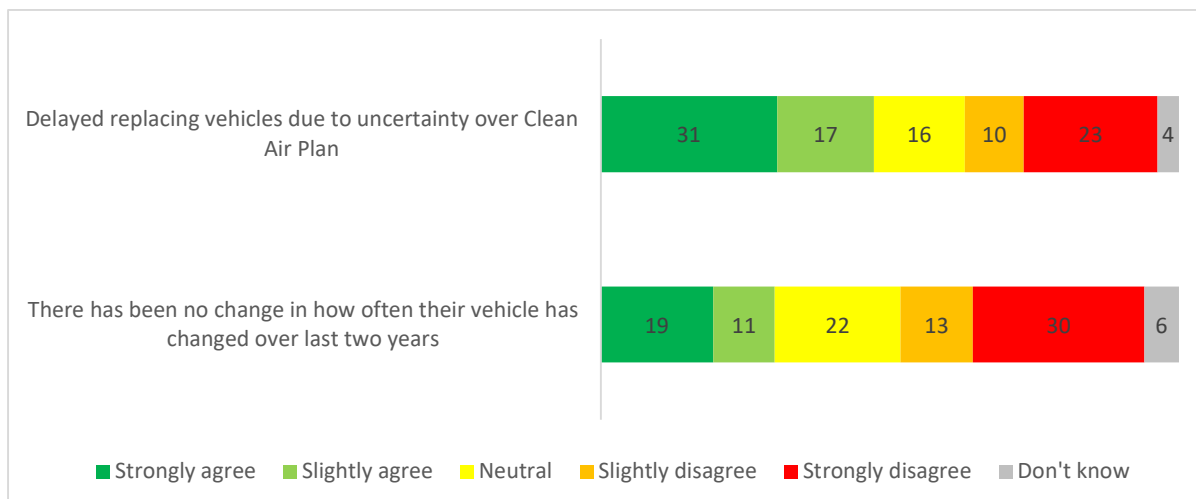
A few respondents commented about electric HGVs in the in-depth interviews and they all considered them to be too expensive with one saying they believed they cost over £250k. All expressed concerns about their cost, lack of availability in general but also practical concerns such as battery life and reliability, lack of charging points across Greater Manchester and the amount of time required to change vehicles.

"I don't even think you can get electric HGVs for less than probably £250,000 ... I did look into it briefly when the charges started coming about ... the worry there is we can be travelling from Warrington up to the top of Scotland ... can you imagine if you didn't get there or you had to keep pulling up to charge your vehicle" (HGV business)

"local vehicles are probably covering maximum of 250 miles a day. My distance vehicles are probably seven or eight hundred ... they'd run out of battery before they got anywhere, then they'd have to park up for probably two or three hours to charge" (HGV business)

4.2.3 Other Considerations Made About Replacing A Vehicle

Almost half of respondents (48%) had delayed replacing their vehicles due to the uncertainty over the Clean Air Plan. Almost a third (30%) felt there had been no change in how often they have changed over vehicles.

Figure 4.6 Other Considerations on Vehicle Replacement (%)

Base: 216 respondents: HGV and specialist HGV businesses were asked these questions

Businesses with at least one non-compliant HGV strongly agreed they have delayed replacing their vehicles due to CAP uncertainty and strongly disagreed that there had been no change in how often they replace their vehicles compared with businesses with compliant HGVs (40% and 36% compared to 13% and 20% respectively).

Uncertainty of CAP: Evidence from the in-depth interviews

Reasons businesses did not upgrade

- Deciding to “sit on the fence” and wait for information about the CAP. Businesses with limited finances, owners did not want to make significant investments which could prove unnecessary.
- Uncertainty about the compliance requirements for the CAP and whether they’d receive funding.

“I heard [the Clean Air Plan] was going to happen and that it was imminent... I was looking into buying another a truck to replace one of ours and filled out a form for a grant to replace it, but they then pulled the funding and said it was under review... It’s pretty tough, because I still don’t know what’s round the corner” (HGV business)

Reasons businesses chose to upgrade

- Two respondents explained they had already upgraded some of their non-compliant HGVs to avoid the proposed charges and used terms such as feeling “forced into upgrading” and “panic bought” due to possible availability issues with new Euro 6 vehicles.

“To be honest with you, it was a bit of panic buying as well, because we were aware that the changes were possibly coming in at the time” (HGV Business)

4.3 Clean Air Plan: In-depth interviews

4.3.1 Awareness of proposed Clean Air Plan

All respondents were aware of the previous CAP, the area it covered, and the charges that were proposed. Most were aware that the plans were now under review.

- Most said they personally felt the air quality in Greater Manchester is not poor or an issue, some acknowledged it can be bad in certain areas where traffic builds up, although they felt it was not as bad as other areas such as London.
- Some felt the CAP should have been implemented on a smaller scale, with a few suggesting that it would be more appropriate to focus on the city centre instead of the entire Greater Manchester region.

4.3.2 Views on new proposed Clean Air Plan

Initial thoughts

- All respondents supported the proposal of having no charges for non-compliant vehicles, explaining how they felt it would be unfair to charge for reasons already discussed such as difficulties with upgrading.
- Many also felt it would have been “dangerous” for the economy to have implemented charges in 2020 because of the impact it would have had on businesses and livelihoods considering the current financial climate and increasing costs they are currently trying to deal with.

“I think it’s a very dangerous approach to the economy ... It’s just not sustainable and it’s quite dangerous ... I think a lot of people of a certain age and certain stages in the business would probably say ... I’ve had enough” (HGV business)

- The two respondents who shared that they upgraded some of their HGVs over the last 18 months specifically to avoid the previously proposed charges said that although they supported the new proposals to have no charges, one felt “bitter” about already upgrading, and the other respondent said that if they had known the charges would not be coming in, they probably would not have upgraded their vehicles as soon as they did.

“Could have saved a fortune ... I don’t think we would have made that change over, if it wasn’t for that announcement” (HGV business)

- Respondents felt there needs to be more communication and awareness raising about the new proposals and in particular the plan for charges to be dropped, explaining that many are very concerned about potential charges and that it is influencing business decisions including as when they upgrade their vehicles or whether they even continue to operate..

The positives and negatives of the new proposed CAP and its impact

- Many said that if there are no charges for using non-compliant vehicles, this will allow businesses to continue operating as well as taking the pressure off most with non-compliant vehicles who do not yet feel ready to upgrade.

“It just helps us ... we’re not under pressure to say borrow money to go and invest. We don’t want to be doing that, we want to be able to go and invest from within and we didn’t want a timescale of yes, you have to be done by this time next year or the following year ... we are definitely going to be investing ... It’s something that we have as a company plan anyway” (HGV business)

“They couldn’t get the chips over to make the new cars, so all of a sudden, second-hand cars went through the roof for six months. That’s what it’s done to wagons too, it’s just sent them up [in price], because people know that you have to have one if you want to carry on and run your business cost-effectively, but now I know [the Clean Air Plan] has been delayed, so there’s no need for me to be rushing into anything” (HGV business)

- Most felt that it will mean less businesses upgrading their vehicles as there is no “deadline” to upgrade to avoid the charges.

“It’s nice to know there isn’t a deadline for you or demand for you to upgrade or you’re going to get charged. We don’t want to be borrowing money. It’s not something we want to be doing and, to be fair, we’ve never really done that as a company, just for the reasons that we don’t know what’s going to happen round the corner. That’s another thing in the construction game at the moment, and I expect that’s for everybody. We used to be able to see what’s ahead of us, months and months ahead, but it isn’t like that anymore, just because of the way sort of the world’s running at the moment” (HGV business)

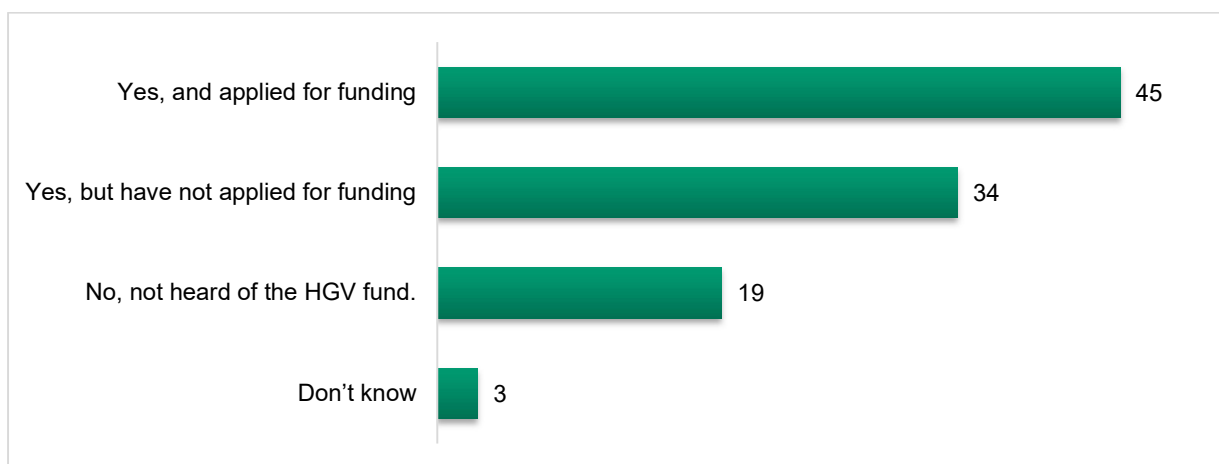
- Some said that if the CAP had come into effect, they would have needed to pass charges on to customers which in turn could have affected their business. Business owners felt

their business and end customers would benefit and as a result of the proposed non-charging CAP.

4.3.3 Funding a replacement vehicle

Survey data shows that 79% of respondents had heard of the Clean Commercial Vehicle Fund, and 45% had already applied for funding. Over half of those who commented having applied for funding (n=26) was that funding was not enough to meet the needs. Of those who did not apply for funding and provided a comment most (n=25) didn't qualify for funding.

Figure 4.7 Clean Commercial Vehicle Fund Awareness (%)



Base: 188 respondents: specialist HGV drivers were not asked this question

Funding: Evidence from the in-depth interviews

Respondents were shown the proposed Clean Commercial Fund as agreed in 2021 as shown below. Information included the proposed replacement grants, retrofit grants, vehicle financing options and the proposed eligibility and vehicle cap.

Measure	HGV Policy
Replacement grant	<7.5t - £5k
	<18t - £7k
	<26t - £9k
	<32t - £12k
	<44t - £6.5k
Retrofit grant	Up to £16k
Vehicle Finance	Total contribution capped at up to £12k (dependent on vehicle size)
Eligibility & Vehicle cap	GM, 5 vehicles

Views on replacement grant

- Most felt that the proposed funding amounts are very low and will not attract many to upgrade sooner than they feel is necessary, particularly when new, compliant HGVs can cost over £100k.

- One respondent felt the funding amounts should be at least 25% of the cost of a compliant vehicle to encourage people to upgrade.

“my first thought is obviously it’s not enough ... but they’ve got to be looking at 25% of what the value is” (HGV business)

- A few felt the proposed funding could act as an “incentive” together with part-exchanging their existing vehicles, but they believed most will prefer to continue using their vehicles for longer unless there was a business reason to change their vehicles.

“It’s certainly an incentive to say do we take this opportunity now with a part ex cost to at least do the costings for one of the vehicles” (HGV business)

Views on retrofit grant

- Some owners would not consider retrofitting as they felt it only changes the Euro standard and emissions of the vehicle, whilst the rest of the vehicle remains the same.

“Retrofit’s just going to make it so it’s Euro 6 compliant, as regards to the exhaust ... the vehicle itself is still going to be a certain age and the body’s going to be a certain age and the machine itself is going to be a certain age, just to change the exhaust is not really where we want to go with it. We want to be upgrading the whole thing” (HGV business)

- Some felt that if the funding for retrofitting covered close to the total or the total cost to retrofit, they would consider this. However, concerns were raised about the amount of time taken to do the retrofit resulting as business could not afford for a vehicle to be out of action for any significant amount of time.

“I think that’s quite a, I would say a reasonable amount, it’s not the full amount, but again I wouldn’t expect funding for anyone to buy something completely without putting something in” (HGV business)

- Concerns were raised about retrofitting damaging engines and vehicles based on the experienced of others who had retrofitted their vehicles.

Views on vehicle finance

As with the comments on the replacement grant amounts, all felt that this amount was very low in comparison to the cost of vehicles and that more would need to be offered for it to encourage people to upgrade sooner.

Views on eligibility and vehicle cap

- **Lack of awareness:** respondents were generally unaware of the proposed CAP or that funding for HGVs was already available. The main detail they felt was important was:
 - Clarity of the funding process;
 - Finance amounts;
 - Eligibility; and
 - How to apply.

- **Easy of application:** One respondent had tried to apply for funding in 2022 and recalled it took them two hours to start the funding application and felt it was difficult and could be made simpler and clearer.

“I heard it was going to happen and it was imminent, and we were going to sell the truck in question and I filled out a form and found out there was a grant to replace it ... And then I was looking into buying another one to replace that and then all of a sudden they pulled it or they said it was under review” (HGV business)

- **Vehicle Cap:** There were mixed views about the cap of funding for up to five vehicles per business, with some feeling it would be unfair to those with larger fleets, whereas others

felt that there needed to be a cap to ensure the funding was fair and spread out and not taken by only larger businesses.

“there has to be a limit set ... for those who’ve got six, ten, fifteen, twenty vehicles, then they might not feel that that’s sufficient ... there does have to be a cut-off point” (HGV business)

- Most felt that funding should **only be available to those based within Greater Manchester** if there is no charge, but one said the funding should be available to those outside too if the charges are brought in as it would negatively impact those who regularly travel into the area, such as delivery services.

Views on upgrading / retrofitting

Most respondents felt they would not upgrade their non-compliant HGVs earlier than they would have done without a CAP because the proposed funding amounts were not considered to be enough. A few said they would like to look into the funding information in more detail to understand what they could get and what the funding process involves.

Views on targeting funding

Most felt that the priority should be the oldest and most polluting vehicles and not a first come first served basis for funding.

Views on compliance standards

Some respondents shared that they were concerned about the current required Euro or emissions standard changing and this was another reason for them not wanting to upgrade their vehicles until the plans for CAP are confirmed.

4.3.4 Other measures / suggestions to encourage upgrading

A couple of respondents felt there should generally be more awareness raising about the importance of air quality and limiting environmental impacts, with one suggesting that there should be a large media campaign raising awareness about the source and harm of nitrogen dioxide and the damage it causes to people and the environment as a method to encourage people to upgrade to compliant vehicles.

“I think people need to be made more aware of why the clean air programme is a thing. Maybe the route of advertising how bad the nitrogen level is and explaining to people what the negative impacts on the environment are” (HGV business)

Survey respondents felt funding (79 mentions) and the availability of suitable vehicles and/or help finding these vehicles (11 mentions) were the main ways to encourage an upgrade to cleaner vehicles.

5. Findings: Coaches

5.1 Introduction

In this section the findings from the coach survey are shown with supplementary detail delivered by the six in-depth interviews completed with coach operators.

Nineteen businesses who own coaches that make pick-ups/drop-offs within Greater Manchester responded to the survey as shown in **section 2.2.8**.

5.1.1 Response from the online survey

- The reliability, purchase cost and running costs (all n=9), low emissions (n=8) and the make or model (n=7) were the most important factors owners considered when purchasing a coach;
- When asked what age their next replacement vehicle would be, nine businesses said it would likely be three-five years old, three would replace with a brand new vehicle;
- Seven responses said the target purchase price of the next vehicle they get will be between £100,001-£225,000. Three each said the coach cost would be between £20,001-£55,000, between £55,001-£100,000, or over £225,000; and
- The majority (n=14) said they intend to purchase the next vehicle on finance with four saying they would pay outright or pay cash.

5.2 Replacing vehicles: In-depth interviews

5.2.1 Trading conditions

Like the findings from interviews with taxi drivers and HGV businesses, coach operators felt the last 12 months and last few years have been very difficult and has caused a lot of issues for their businesses and ability to upgrade. All discussed how their amount of work and number of drivers changed overnight when the first national lockdown came into effect. Some said many coach drivers switched to driving HGVs or secured other jobs and have not returned.

“It’s been difficult, to be honest. Obviously it’s been unstable with actual work, then the fuel prices. All our maintenance costs, wages, everything has increased, and we’ve had to obviously pass that on to the customer, which has made it more difficult to find work” (Coach operator)

“Covid has been a struggle, then coming back into it, the massive fuel increases has hurt dramatically, the cost of living, drivers want more wages, but customers don’t want to pay a lot more than what they have been doing” (Coach operator)

Although all said they were concerned about the potential charges implemented as part of the CAP, most had chosen not to upgrade sooner than they felt they needed to and were waiting for confirmation about the plans for the CAP before committing themselves. Some added that they would likely close their business if charges were introduced in Greater Manchester.

“it’s a good thing that after Covid we’re not going to get forced to close our business, because that’s what would happen if the charging zone came in” (Coach operator)

How often vehicle/s are renewed, when do they next expect to change

- Some respondents said they upgrade their coaches one at a time when they feel they are no longer fit for purpose and their maintenance is costing too much, but they generally try to use their vehicles for as long as they can.

“if the vehicle’s starting to look tired and it’s starting to cost us money on maintenance that’s basically when we start to look at upgrading, we like to class ourselves as having a higher spec of vehicle” (Coach operator)

- Others try to upgrade each coach every 3 to 5 years but sometimes longer, with COVID-19 and financial uncertainty having impacted on this and resulted in some delays.

“If we hadn’t had Covid we would have upgraded a few vehicles already. Covid has put us back years and years” (Coach operator)

- A couple of respondents added that they are regularly searching for coaches that would suit their needs and would upgrade if they found something they considered to meet their business or client needs.

“I’m always looking at whether we’ve got the right vehicles for what we need ... we’ll never have the right vehicles, because as if you go and buy one for a certain thing, you never use that again and you need something else ... But we have been gradually changing the fleet and the Euro 6 one is a recent purchase, because I got it at a price I couldn’t really say no to” (Coach operator)

New and used vehicle affordability and availability

- Most look to buy second-hand coaches due to the high cost of new coaches, with respondents explaining new compliant coaches cost £270k+ (for example when disability lifts are included), whereas second-hand can cost £80 to 90k.
- A couple of operators explained how coaches that offer individual fares are required to have wheelchair access which impacts on vehicle cost.

“we’re also getting hit with public service vehicle accessibility, regulations, so anything where you have individual fares have got to have wheelchair access” (Coach operator)

- There was a feeling that compliant coaches are generally available, but it can be difficult to find compliant coaches with the right specification to suit their needs. When looking to buy second-hand, the main aspects considered are:
 - Vehicle cost;
 - Vehicle age;
 - Euro standard;
 - Mileage;
 - Engine;
 - Seating and storage capacity;
 - Interior and general quality; and
 - Suitability of the vehicle for their needs.
- Most felt that their current coaches have depreciated in value, particularly those that are non-compliant.

“I think the cost of Euro 6 vehicles hasn’t come down. The coaching industry’s a bit of a weird one ... Covid killed it and so the price of vehicles plummeted. The ’09 one that we bought just before Covid, we bought at the time at a really good price and now I can’t sell it ... but that’s not because prices have gone up anywhere else, it’s just that the market has dropped out of those vehicles, due to Covid and clean air zones” (Coach operator)

5.2.2 Electric vehicles (EVs)

Current EV use

No respondents were using electric coaches, but one had trialled an electric coach earlier in 2022 and found the experience to be positive. The barriers to EVs mentioned were:

- Cost (over £350k);
- Concerns about the battery life and EV charging infrastructure; and
- The lack of choice when buying electric.

Therefore, there's a feeling that electric coaches are currently "impractical".

"The other problem I've got is infrastructure. If I buy an electric coach and bring it to, take it to a city, whether it be Manchester, whether it be Birmingham, whether it be London, there is no infrastructure for me to charge when I reach there" (Coach operator)

What would encourage EV uptake in the future

Respondents held similar views which included:

- A clear plan from the government about EVs would build confidence;
- The installation of more charging infrastructure across Greater Manchester;
- Proven, technology for electric coaches; and
- Affordable vehicles were available and / or government incentives were provided.

5.3 Clean Air Plan: In-depth interviews

5.3.1 Awareness of proposed Clean Air Plan

- All respondents were aware of the previous CAP, the area it covered, and the charges that were proposed, with most being aware that the plans were under review.
- Some felt that CAP should have been implemented on a smaller scale, with a few suggesting that it would be more appropriate to focus on the city centre or within the M60 instead of the entire Greater Manchester region.
- A few felt that coaches should not be targeted by any CAP charges as they felt modes offering mass transit should be encouraged and supported rather than charged.

"The biggest concern in our industry is that they always target coaches and trucks because they're an easy target. You can find out who they are, and you can tell them you've got to do this, you've got to do that. It's not a good thing to go and target car users, because nobody likes it, so that's where it gets a bit frustrating that we're always the ones that have to upgrade. We've got a coach that's taking fifty kids to school, instead of like thirty or forty cars. I appreciate that nitrogen only comes out of diesel engines, but emissions-wise, even a Euro 5, we are cleaner than thirty loads of cars, but politically, it's not a good thing to target car users" (Coach operator)

5.3.2 Views on new proposed Clean Air Plan

Overview

- Most respondents supported the proposal of having no charges for non-compliant vehicles, explaining how they felt it would be unfair to charge for reasons already discussed such as difficulties with upgrading, but mainly because of the high cost of coaches compared to other affected vehicles.
- They also supported this because they felt it would have been "badly timed" due to the current financial climate.

- Some had considered closing their business if CAP was implemented with charges, explaining that they do not think they could have afforded to upgrade and would not be able to afford to pay the charges, even if they tried passing charges on to customers.

The positives and negatives of the new proposed CAP and its impact

- Many believed the decision not to charge will only be temporary and that charging in Greater Manchester will be brought in in future years.
- A few respondents said that the lack of charging in Greater Manchester may cause some coach operators to delay when they were planning to upgrade, whereas others said they will still want to upgrade when they can to avoid these future charges in Greater Manchester as well as in other areas that already have Clean Air Zones.

“Well, it helps a great deal if they are not charging, because then I don’t have to start putting costs on to fares or what have you, but then it also doesn’t, I probably won’t rush to upgrade the vehicles as quick” (Coach operator)

- The two respondents that upgraded most of their coaches to avoid the CAP charges said they had mixed feelings about there being no charges and funding being proposed for those with non-compliant vehicles to help them upgrade. Both explained that they felt it is unfair to them in terms of competitiveness.

“With this new structure, I’ve invested, I’m ready to go ahead with it, operators that are in Greater Manchester are going to get funding who aren’t ready and they’ll be getting a financial advantage on us, a competitor advantage to have newer vehicles that have been subsidised by the council, which we aren’t. So it doesn’t seem fair” (Coach operator)

- Most felt that most of their clients and customers are not interested in vehicle compliance. One respondent believed that if their customers had a choice of travelling in an older, non-compliant coach for the current price or a new, compliant coach for a higher price, they believed all would choose the cheapest option.

5.3.3 Funding a replacement vehicle

Views on replacement grant

- A couple of respondents felt the amounts would help them to upgrade, others felt that the amounts were very low in comparison to the cost of new vehicles leaving too big of a “gap” in funds that operators would have to source themselves.

“it doesn’t touch the sides ... we’re talking £80k for a 2015, thereabouts, but £200k plus for a new 16, a Euro 6. The gap’s too big” (Coach operator)

“we’ve been waiting really for the funding, obviously we’ve not done anything until it arrives, because why would you? So, yeah, I think that’s a great idea” (Coach operator)

- A few felt that clarity is needed about whether funding is available for upgrading to second-hand vehicles or only new coaches.
- Concerns were also expressed about being able to find dealers who can offer such replacements using the funding.
- A few discussed how they believed bus services and those running registered services in Greater Manchester received full funding to upgrade their vehicles as part of CAP, and so they felt it was unfair that other coach operators were left out and received no funding.
- One respondent also shared concerns having heard rumours of larger bus companies using funding to upgrade buses that do not even operate in Greater Manchester.

Views on retrofit grant

- Most felt that the retrofitting grant would be attractive, with one explaining they were quoted a retrofit cost of £19k for a coach, and they felt that £16k towards this would be beneficial.

“I know that the retrofit is £19,000 ... we’ve had that priced already, so obviously it’s a big chunk, three grand is three grand, but if it makes it compliant it’s worth it” (Coach operator)

- A different respondent said that they were quoted £16k each to retrofit their coaches prior to COVID-19, but the cost is now £24k. They believed the CAP has contributed to this price increase.
- A couple of respondents were concerned by the wording of “up to £16k” for retrofitting, and they felt that this should be clarified.
- Respondents had not heard from coach dealers promoting retrofit options which raises concerns for them as they are not being pushed by dealers, making them feel like they are not viable options.
- Some did have some concerns about retrofitting potentially damaging their coaches and their engines from what they had heard from others, so they wanted to investigate this further before deciding.
- A few were also unsure if Euro 4 coaches could be retrofitted to Euro 6.

Views on vehicle finance

As with funding amounts, there were mixed feelings with some feeling that the amount was not high enough to be attractive, whereas a couple felt that the finance option may be more attractive, particularly if there are low interest rates.

“we’d have to finance it ... If it was a very low interest rate ... I would be for that one, if I had an older one, then yes, I would look to replace it, but ... they’re only offering £16,000 for a replacement on the buses and that’s not enough” (Coach operator)

Views on eligibility and vehicle cap

- One respondent explained that they had previously tried to enquire about funding for coach operators as part of CAP, but they were told that coach operators could not apply unless they were running registered bus routes. This previous experience led them to feel that further details about the funding process and eligibility needs clarifying.

“every time I have gone to apply for it, for the coach that is not compliant I get an email back saying that the coaches, because they’re not doing a registered bus service the grants are not open” (Coach operator)

“The five vehicle cap, I know that wasn’t for service buses, why would that be for coaches?” (Coach operator)

- Most agreed that funding needs to be fair to all and felt that the cap of funding for up to five vehicles per operator will be “tough” on larger companies. A few were concerned about larger companies using up most of the funding if there wasn’t a cap.
- They felt that funding should be provided to all who have contracts within Greater Manchester and these were valid before CAP was announced, whether they are based inside or outside of Greater Manchester.

Views on targeting funding

There were mixed opinions on how to target funding

- One respondent discussed how the decision for operators to upgrade their smaller fleet can be a much bigger decision compared to bigger operators with larger fleets but more financial security to afford to upgrade.
- The coach operator based outside of Greater Manchester felt that targeting funding to only those with depots within Greater Manchester would be unfair to those based outside but mainly operate inside Greater Manchester. They suggested that data collected via the DVSA should be used to identify which coaches are making trips to Greater Manchester, how often, and where they travel to within the region.

“It doesn’t matter where you’re based or ... if you run five vehicles or you run five hundred vehicles, if you are only allowed five vehicles worth of funding, well, those five hundred vehicle operators going through the spots that are causing the problem, whereas the operator with five vehicles doesn’t ever go through them, you’re not achieving what you want to achieve” (Coach operator)

- A few felt funding should be targeted at those with the oldest and most polluting vehicles first to improve air quality and reduce their environmental impact, although they felt either approach may result in funding running out quickly.

Views on compliance standards

- Although they felt that Euro standards was a suitable way for determining vehicle compliance, one respondent suggested a review of a vehicle’s emissions as part of its MOT would be an alternative.

“... actual figures from emissions from MOT, that would be the only other way” (Coach operator)

5.3.4 Other measures / suggestions to encourage upgrading

- The proposed funding amounts need to be higher to enable and encourage people to upgrade their coaches sooner than they naturally would particularly because the value of non-compliant coaches has decreased.

“I think people will upgrade when the finances allow them to upgrade ... I don’t think £32,000 of funding, it’s a lot of money ... if you can’t afford to pay for the other two thirds of a second-hand vehicle, then it’s just not going to happen” (Coach operator)

6. Additional findings from across the in-depth interviews

This section summarises the views of all types of respondents who completed an in-depth interview, summarising the views on Automatic Number Plate Recognition (ANPR) cameras and other suggestions to reduce levels of nitrogen dioxide.

6.1 Proposed use of ANPR cameras

ANPR: impact of letters

- Almost all respondents felt that the process of identifying non-compliant vehicles and issuing letters would successfully raise awareness about CAP and the availability of funding.

“I think it’s quite a good idea, because you’re keeping everyone in the loop” (HGV business)

- Four respondents added that it would not encourage many to upgrade their vehicles because there are other factors such as the proposed funding amounts and the proposed non-charging zone, therefore issuing letters would largely be a “waste of resources” and expensive compared to the success rate of businesses upgrading to compliant vehicles

“My opinion is, no consequence, nothing will happen, you’re just sending out a load of wet letters” (PHV driver)

“I would think that would be a waste of like public money, or whatever, I can’t see the need in doing that” (PHV driver)

- A few who did agree with the proposed process said they felt it would be beneficial to monitor compliant and non-compliant vehicles entering and travelling through Greater Manchester and if some vehicles upgraded as a result of letters.
- Respondents suggested that letters should be “friendly” and not “threatening” and clarify where further information can be found about funding, the process of applying and timescales.
- Some said that letters should not be repeatedly sent to the same person for each time they enter Greater Manchester as they felt they would become a “nuisance”.

General Data Protection Regulation (GDPR)

- Most felt people wouldn’t have any data privacy issues with being captured by the ANPR cameras as they felt most are used to being monitored and captured on cameras on a daily basis, with a few feeling that having more cameras increases safety.
- A few felt that some may have concerns and issues with this additional monitoring of their activities and potential breaches of data privacy.

6.2 Other suggestions to reduce levels of NOx in Greater Manchester

- Some felt that CAP and implementing charges would be the most effective way to reduce air quality issues in Greater Manchester, but most who felt this way said CAP should be implemented on a smaller scale, with some suggesting focusing on central Manchester or within the inner ring road.

“I’d support a chargeable clean air zone within the city centre, which I think a lot of people would” (PHV operator)

“The biggest thing for me was the scale of the clean air zone. In my opinion it’s far too big, it’s not necessary, it should have started inside the Mancunian Way” (Coach operator)

- Some felt that category B vehicles were not the problem and that other sources of pollution should be targeted, including private cars.
- Coach operators, added they felt there needs to be more encouragement of mass transit and reducing the number of car journeys, particularly where public transport or coach services are available.

“I thought the idea was to get people on public transport or group transport, rather than fifty cars going, one coach can go” (Coach operator)

Road infrastructure

- Existing road infrastructure and traffic calming measures were identified by some respondents as areas that need improving to improve traffic flow and reduce nitrogen dioxide emissions. There was a feeling there is not enough road space, and bus and cycle lanes reduce this space but they are underused.
- Others felt that traffic lights and other traffic calming measures need to be removed or improved to reduce traffic congestion and idling.

“we know that there’s hotspots, but them hotspots are basically caused by either terrible traffic systems, for example, the light systems ... So road networks can be improved” (Coach operator)

Public transport

- Some respondents felt that further improvements should be made to public transport to encourage the modal shift from cars to mass transit, including making public transport fares cheaper, expanding services and their frequency, increasing the number of electric buses in Greater Manchester, and making services safer, more reliable and accessible to people.

Electric vehicles (EV)

- A few respondents suggested that government needs to making improvements to EV infrastructure in Greater Manchester but more widely across the UK, as well as making EVs more affordable and viable for people to purchase.

“they don’t have any infrastructure in Manchester at all, they don’t have any charging points, how are you going to charge the car ... They don’t have the infrastructure at all in Manchester for them to rule out this clean air zone” (PHV operator)

Other suggestions:

A small number of respondents suggested:

- Improving existing green spaces and creating more green space across Greater Manchester;
- Targeting larger companies who create more pollution and contribute more to poor air quality;
- Allowing private hire vehicles to travel in bus lanes to reduce the distance they have to travel; and
- Allowing coaches to park outside main venues for longer periods rather than requiring them to driver around and return to the same space if they have waited too long.

6.3 Other comments

- **Greater clarity/ give confidence of the proposals:** Some respondents felt that there should be greater clarity about whether charges will be implemented soon. If charges are

introduced the required timings for upgrading vehicles should be staggered to avoid vehicle supply and demand issues.

- **City centre only CAZ:** Some felt the previously proposed CAP would have worked on a smaller scale in Greater Manchester and, if so, they feel that it should be implemented on a smaller scale and
- **Consistency in licencing standards:** Some private hire vehicle drivers, operators and hackney carriage drivers felt the current inconsistency is unfair and can cause confusion. Some commented that there's a need for clearer, consistent policies and information across Greater Manchester to get people onboard.

"maybe try and get everybody on side ... you've got local MPs pushing one way and you've got councils pushing the other way, so it was all fragmented, which then people don't know whether they're coming or going ... get everybody onside all pushing in the same direction" (PHV operator)

- **Communication:** One respondent felt that there has been a lack of planning and consultation in relation to CAP, so they felt that there should be further consultation with people and businesses before anything further is implemented.

"I just think it was all set out wrong, it was all done wrong, there wasn't much consultation ... maybe just have a consultation with an association in Manchester, but they need to go out and speak to a lot of people" (HGV business)

6.3.1 Comments provided by Taxi trade organisations

Organisations who represent the taxi trade provided feedback about funding and other measures to encourage vehicle owners to upgrade to reduce cleaner vehicles. Ten responses were provided in the survey and these are summarised below:

Funding and upgrading vehicles

- Half the organisations commented that funding needed to be at a level of around 50% of the value of a vehicle with other suggestions of full grants for EVs;
- There are concerns about the reduced value of old, non-compliant vehicles that will be (are being) traded in; and
- Allow owners to purchase compliant vehicles with a grant from their chosen supplier to enable them to shop around for the best deal for them.

Electric vehicles (EV)

- The move to EVs should be transitioned as EVs become more affordable and available, with retrofitting and hybrids seen as viable alternatives; and
- The challenge to reduce or remove the need to charge vehicles during working hours needs to be overcome, as taxi drivers are often unable to charge from home.

7. Detailed respondent profile

7.1 Taxi survey: Type of respondent

Table 7.1 shows that 82% of respondents were licensed drivers, with the majority (71%) owning their vehicle.

Table 7.1 Type of respondent

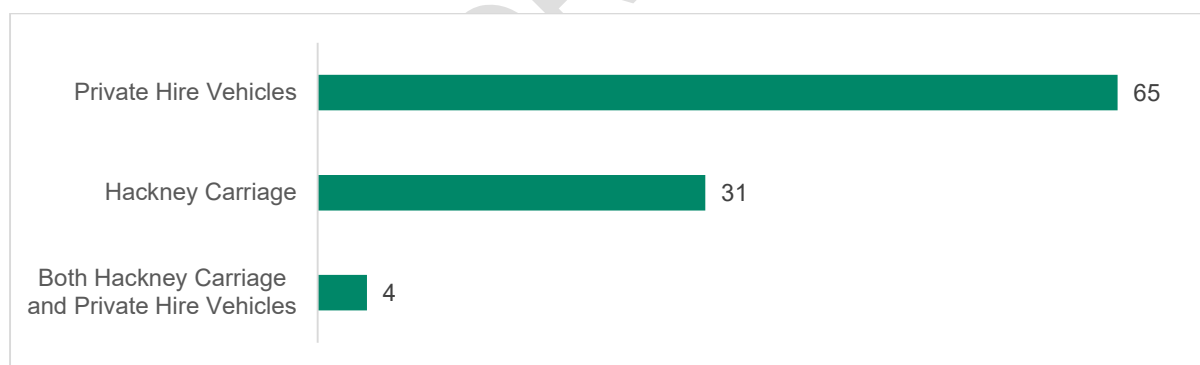
Respondent type	Total	%
Owner Operator	149	17
Owner Driver	641	71
Track Driver (rent vehicle)	104	11
Taxi Trade Organisation	10	1
Base	904	100

There were 149 owner operators who responded, of which 72% were sole traders, 23% employed at least one person and 5% did not provide their business size.

Taxi vehicle type

Twice as many responses were provided by those who only drive private hire vehicles compared to those who only drive hackney carriages as shown in Figure 7.1

Figure 7.1 Taxi Service provided (%)



Base: 894 (All respondents excluding those who responded from taxi trade organisations)

The split between the type of taxi service provided and the type of respondent was similar for both types of taxi as shown in Table 7.2 with most respondents being owner drivers and similar proportions for hackney carriage and private hire vehicles.

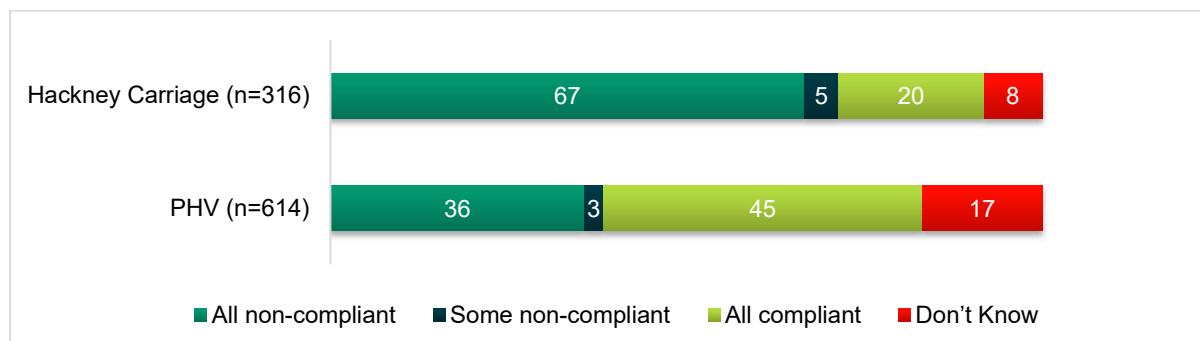
Table 7.2 Taxi Service provided by respondent type (%)

Respondent type	Hackney Carriage	Private Hire Vehicle	Both Hackney Carriage and PHV
Owner Operator	23	12	47
Owner Driver	67	76	36
Track Driver (rent vehicle)	10	12	17
Base (count)	280	578	36

7.2 Taxi survey: Current compliance with emissions levels

Figure 7.2 shows that 72% of those who operate a hackney carriage have at least one vehicle which would not be compliant² with the emissions levels for the proposed GM CAP and 39% of those who operate a private hire vehicle would not be compliant.

Figure 7.2 Taxi type and compliance level (%)



Base: 316 (hackney carriage drivers/operators) 614 (PHV drivers/operators)

7.3 Taxi survey: Licensed district

Most of the respondents are licensed in Manchester (43%). Table 7.2 shows how the survey sample compares with the proportion of drivers registered with each district of Greater Manchester, with Salford the other district with a high proportion of responses compared to the registration.

Locations outside GM included Kirklees (n=5), Wolverhampton (n=4) and Merseyside (n=3).

Table 7.3 Licensed district of vehicles by taxi type (%)

District	Hackney Carriage*		Private Hire Vehicle*		Total	
	Survey	GM	Survey	GM	Survey	GM
Bolton	3	4	18	12	13	11
Bury	2	2	10	6	7	6
Manchester	72	56	29	26	43	30
Oldham	5	4	3	9	3	8
Rochdale	1	5	4	11	3	11
Salford	8	5	22	7	17	7
Stockport	1	6	2	8	2	8
Tameside	9	7	7	6	8	6
Trafford	5	5	5	8	5	7
Wigan	3	7	6	7	4	7
Outside GM	3	n/a	5	n/a	3	n/a
Base	316	100	614	100	894	100

Base: 894 (All respondents excluding those who responded from taxi trade organisations)

² Respondents were provided with a note in the survey to explain that their vehicle registration document (V5C) would help identify their vehicle's Euro emission standard. Once they knew that, then they were able to identify if their vehicle would be compliant or non-compliant based on being Euro 5 or earlier (non-compliant) or Euro 6 onwards (compliant).

**includes those who operate both hackney carriage and private hire vehicles*

The proportion of vehicles with at least one non-compliant per district ranged from 62% in Trafford to 36% in Salford. In Manchester, 59% had at least one non-compliant vehicle, followed by Salford (17%) and Bolton (13%).

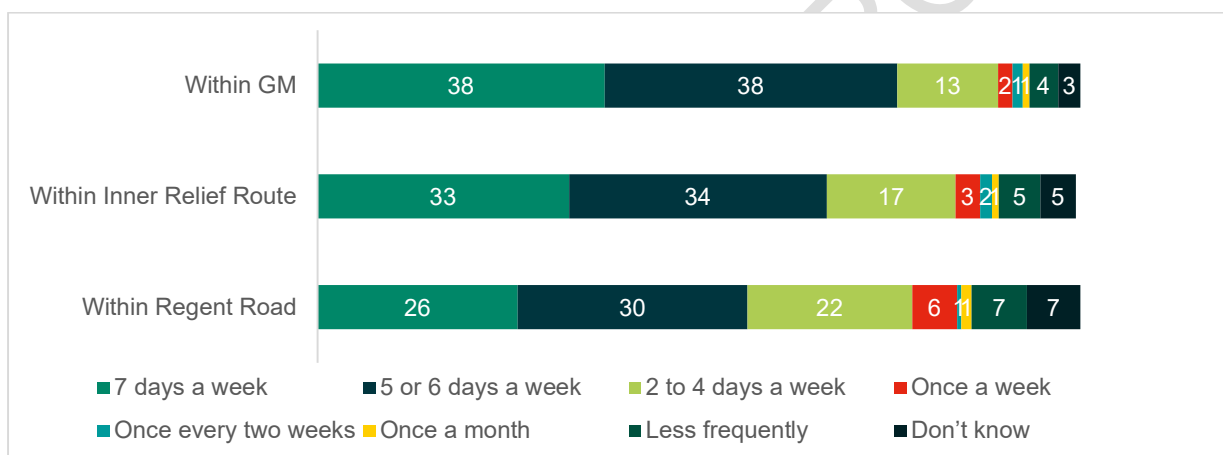
7.4 Taxi survey: Operating in Greater Manchester

There were 87% of private hire operator/owner/drivers and 84% of hackney carriage drivers who operated/owned one vehicle. Figure 2.3 shows for all respondents that:

- 76% operate in **Greater Manchester** at least 5 days a week and 7% once a week or less;
- 68% operate **within the inner relief road**³ at least 5 days a week and 11% once a week or less; and
- 56% operate **on Regent Road** at least 5 days a week and 15% once a week or less.

There were small differences between hackney carriage and private hire drivers.

Figure 7.3 Number of days operating in areas of Greater Manchester (%)



Base: All respondents who operate in each location 894 GM and Inner Relief Route; 893 Regent Road

Demographics

Drivers and operators who were sole traders were also asked to provide their demographic details. There was a broad mix of responses from different ethnic groups, with 56% reporting an Asian ethnic background and 21% a White ethnic background. There were no significant differences in any of the responses based on the driver's ethnic background.

7.5 HGV survey: Type of respondent

Table 7.5 shows that the majority of responses were from businesses with eight responses from representative organisations and 81% of respondents reported they were based in Greater Manchester.

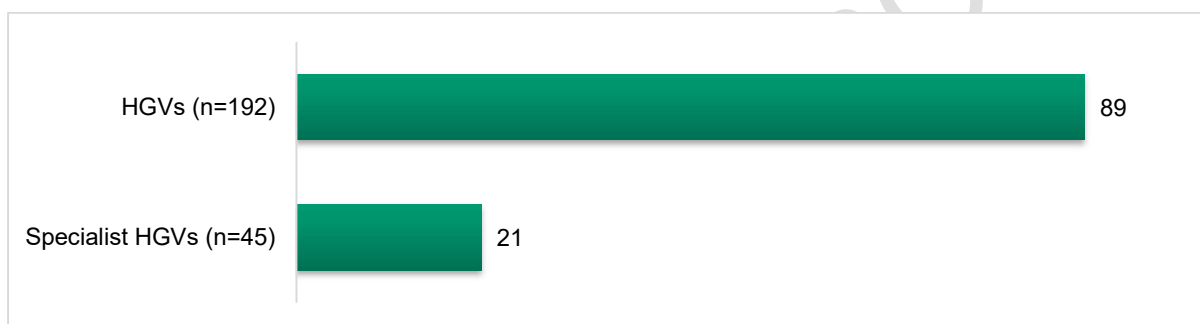
³ Inner Relief Road was defined in the survey as a circular route in the Manchester and Salford areas made up of several roads including the Mancunian Way, Trinity Way and Great Ancoats Street / A665).

Table 7.4 Total Interviews by Respondent Type

Respondent type	Total	%
Business based inside Greater Manchester	168	78
Business based outside Greater Manchester that travels into Greater Manchester	40	19
Organisation based in Greater Manchester	6	3
Organisation based outside Greater Manchester	2	1
Base	216	100

Nearly all respondents (89%) operate a heavy goods vehicle (HGV) to move supplies, make deliveries etc. 80% of those who operate an HGV were registered in Greater Manchester.

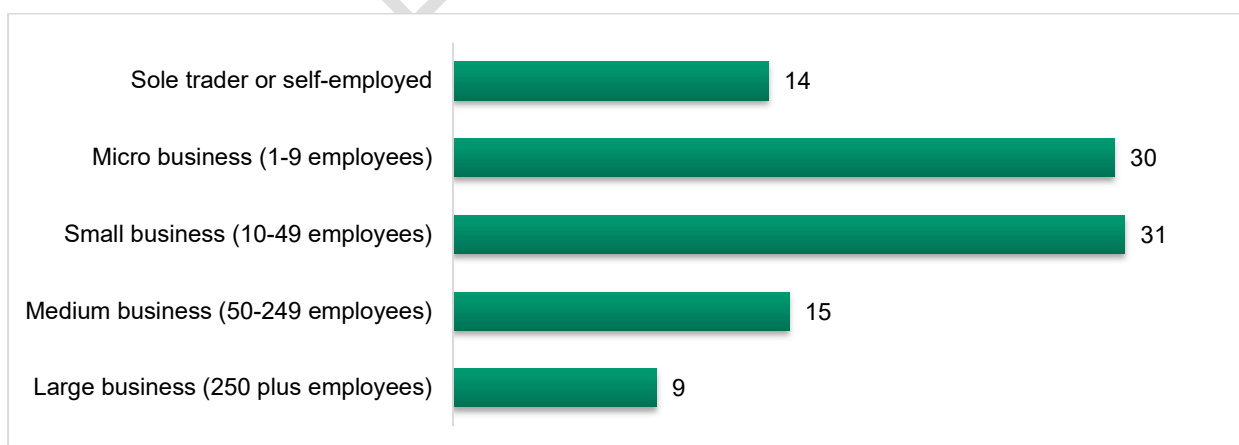
Figure 7.4 Vehicle type operated (%)



Base: 216 respondents: respondents could select both HGV and Specialist HGV

Figure 7.5 shows that 61% of respondents were from micro or small businesses.

Figure 7.5 Business/ Organisation Size (%)

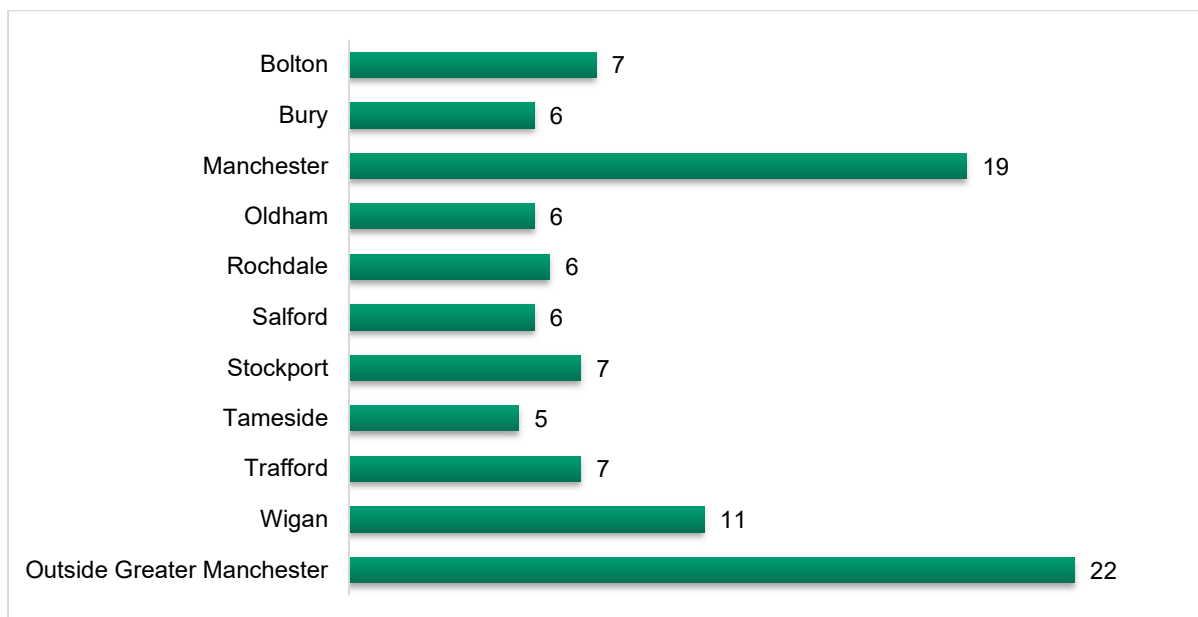


Base: 216 respondents

Sole traders were also asked to provide their demographic details, and these are shown in **Appendix D**.

Figure 7.6 shows the district in Greater Manchester where businesses are registered, there was an even distribution for all districts with the exception of Manchester which had at least twice as many responses as other Greater Manchester districts, except Wigan.

Figure 7.6 Business/ Organisation Registration (%)

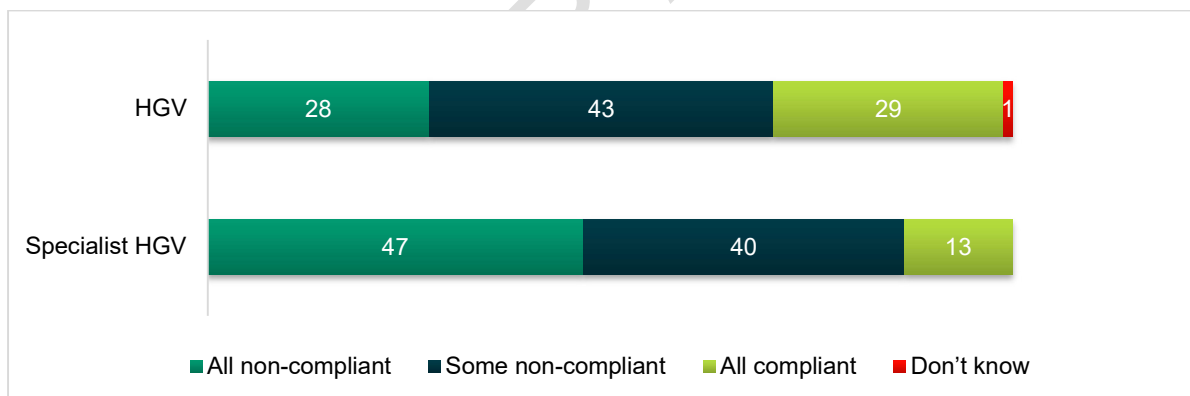


Base: 216 respondents

7.6 HGV survey: Current compliance with emissions levels

Figure 2.7 shows 71% of those who operate an HGV have at least one vehicle which would not be compliant with the emissions levels for the proposed GM CAP and similarly, 87% of those who operate a Specialist HGV would not be compliant.

Figure 7.7 Vehicle Type and Compliance Level (%)



Base: 216 respondents: (192 HGV and 45 specialist HGV; some operate both)
 With a low base, data for Specialist HGVs should be treated with caution

83% of sole traders own at least one non-compliant HGV and 55% of medium or large businesses own at least one non-compliant vehicle. This data has low base sizes therefore should be considered indicative and treated with caution.

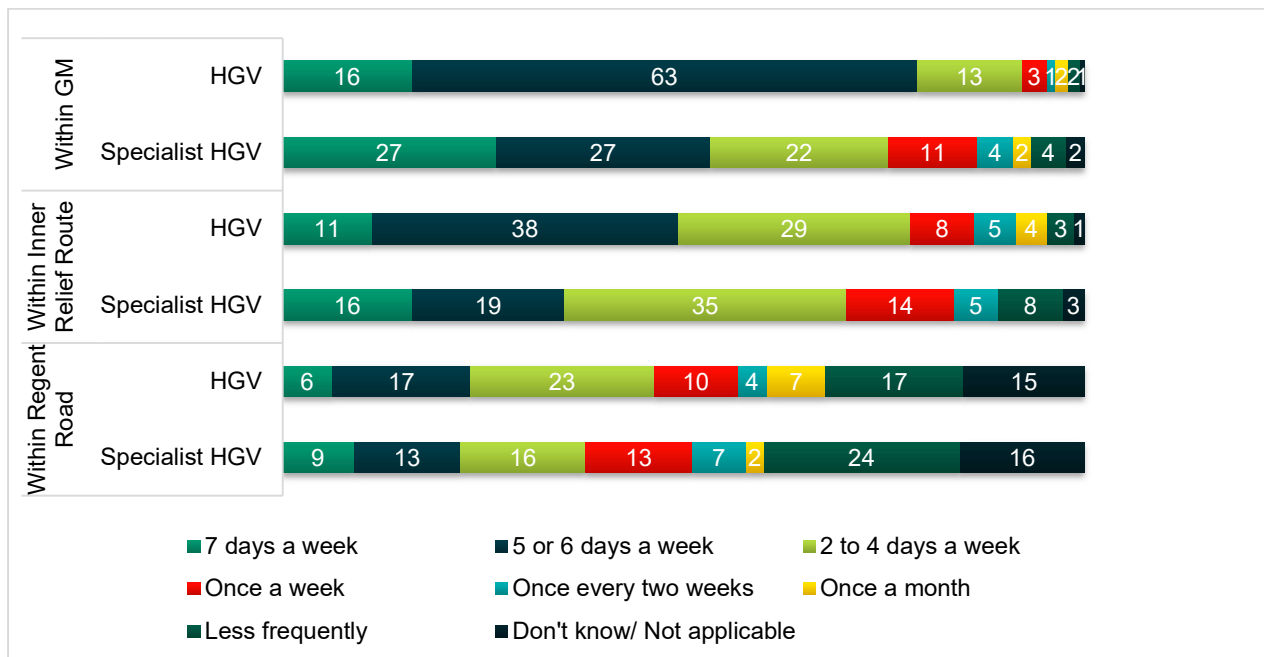
7.7 HGV survey: Operating in Greater Manchester

The median range for the number of HGVs operating in Greater Manchester per business was five to nine for HGVs and two to four for Specialist HGVs. Figure 2.8 shows:

- 79% of HGVs operate **in Greater Manchester** at least 5 days a week and 8% once a week or less;
- 49% of HGVs operate **within the inner relief route** at least 5 days a week and 20% once a week or less; and

- 23% of HGVs operate **on Regent Road** at least 5 days a week and 39% once a week or less of which 17% do so less than monthly.

Figure 7.8 Number of days operating in areas of Greater Manchester (%)



Base: 216 respondents: (192 HGV and 45 specialist HGV; with some operating both)
 With a low base, data for Specialist HGVs should be treated with caution

7.7.1 Coach survey

There were 21 respondents who operated coaches and their profile is summarised below:

- Two businesses who operate coaches do not operate a coach service in Greater Manchester, they offer training;
- Thirteen of the remaining nineteen businesses/organisations operate between 2 and 9 coaches in Greater Manchester, 4 operate ten or more and 2 operate one coach;
- Five businesses operate seven days a week within Greater Manchester and four operate two to six days a week;
- Of those that operate within Greater Manchester, ten operate between two and four coaches within the inner relief route; and
- Twelve businesses said that some of their coaches are non-compliant and eight said all are non-compliant, one business owned coaches which are all compliant.

Appendix A Questionnaires

A.1 Taxi

Introduction

Greater Manchester (GM) local authorities are undertaking a participatory policy development process to develop and shape the new Clean Air Plan Policy, including proposals for funding support.

The case for a new plan, which has been submitted to Government, sets out evidence supporting an investment-led approach, with no charging Clean Air Zone, to address the city-region's nitrogen dioxide air pollution problem. This is to ensure the right funding and eligibility criteria are in place to enable category B vehicles, which includes buses, coaches, taxis, PHVs and HGVs, to be upgraded to those with cleaner engines, while mitigating any additional economic risk or hardship to residents and businesses.

To ensure the development of the new policy is well-grounded in evidence, GM wants the input of key stakeholders, including Taxi operators/owners, and licensed drivers, and are seeking responses to this survey which runs between 5 September and 10 October 2022.

This survey is being conducted by AECOM, an independent research company, on behalf of Transport for Greater Manchester. Transport for Greater Manchester (which is also known as TfGM) is carrying out research on vehicle fleets, vehicle upgrades and views on funding to upgrade to cleaner vehicles to help inform the development of the new investment-led Clean Air Plan. Your feedback will be used to inform the policy development process.

Participation is entirely voluntary. The survey will take around 15 minutes. It will be carried out according to the Market Research Society's Code of Conduct and Data Protection Laws.

Privacy Notice

AECOM will process your personal data on behalf of TfGM (data controller) because it is necessary for a task carried out in the public interest, exercising TfGM's functions under s10A of the Transport Act 1968. We process your special category personal data because it is necessary for reasons of substantial public interest for equality of opportunity or treatment. Any personal data you provide will be held in strict confidence and stored securely and in accordance all legislation governing the protection of personal information, including the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). Data collected from this survey will be aggregated, so you will not be identified. Anonymised data will be shared with local authorities, academic institutions or contractors working on behalf of TfGM for the development of the Clean Air Plan and research purposes. All survey responses containing personal data will be deleted within two years of the closure of the survey. Further details of how TfGM process your data and for details of how you can exercise your rights are available at tfgm.com/privacy-policy or from the Data Protection Officer by emailing data.protection@tfgm.com. For AECOM's privacy policy, please visit aecom.com/privacy-policy or email privacyquestions@aecom.com. Further information about data privacy and your rights under the General Data Protection Regulation (the "GDPR") can be found at the ICO website (data protection regulator) ico.org.uk/for-the-public. As a reminder, please complete the survey by Monday 10 October 2022. If you have queries or need help completing the survey, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available).

[Consent to continue]

SCREENER QUESTIONS

SINGLE CODE

S1	The ten Greater Manchester local authorities are Bury, Bolton, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan. Which of the following best describes you? (select one only)	Routing
1	I am an operator/owner of one or more licensed Taxi or Private Hire Vehicle (Proprietor includes owning a vehicle outright; part-owning the vehicle; vehicle subject to a finance agreement/hire purchase agreement)	
2	I am a licensed driver and owner of at least one licensed Taxi or Private Hire Vehicle.	
3	I am a licensed driver and track (e.g. rent) a licensed Taxi or Private Hire Vehicle	
4	Organisation that represents the taxi trade	Go to C7
5	None of the above apply to me	Screen out

MULTICODE

S2	Where are your vehicle(s) licensed? (select all that apply)	
	Response	Routing
1	Bury	
2	Bolton	
3	Manchester	
4	Oldham	
5	Rochdale	
6	Salford	
7	Stockport	
8	Tameside	
9	Trafford	
10	Wigan	
11	Outside GM (Please specify)	

ASK IF S1 = 2 or 3 licensed driver, SINGLE CODE

S3a	Is your vehicle(s) licensed with the same Local Authority district in which you live? (select one only)	Routing / Notes
1.	Yes – my vehicle is licensed with the Local Authority in which I live	
2.	No – my vehicle is licensed with a different Local Authority (please specify)	Does S2=11 need to be routed separately?

ASK IF S1 = 2 or 3 licensed driver, SINGLE CODE

S3b	Is your vehicle(s) licensed with the same Local Authority where most of your trade is? (select one only)	Routing / Notes
1.	Yes – my vehicle is licensed with the Local Authority I mostly trade in	
2.	No – my vehicle is licensed with a different Local Authority (please specify)	

ASK IF S1 = 1 to 3, SINGLE CODE

S4	Please indicate which of the following services you or your business operate. (select all that apply)	Routing / Notes
1.	Taxi (Hackney Carriage)	
2.	Private Hire Vehicle	
3.	Both Hackney and Private Hire Vehicles	

ASK IF S1=1 to 3

S5	How many company vehicles do you or your business operate across Greater Manchester? (Please tick one for each vehicle type (we do not need to know about cars that are not taxis / private hire vehicles))							Routing / Notes
		None	1	2-4	5-9	10-19	20+	
1.	Taxi – Hackney							
2.	Private hire vehicle							
3.	Other (specified in S4)							

Screen out if S5, 1 to 3 are all 'none'.

SECTION A: YOUR VEHICLE(S) AND USAGE IN AND AROUND GREATER MANCHESTER

ASK IF S1=1 to 3

The Inner Relief Route (also known as the Inner Ring Road) is a circular route in the Manchester & Salford areas made up of several roads including the Mancunian Way, Trinity Way and Great Ancoats Street/A665)

A1	On average, how often does your vehicle(s) operate within...? Please give your best estimate	7 days a week	5 or 6 days a week	2 to 4 days a week	Once a week	Once every two weeks	Once a month	Less frequently	Don't know
a.	Greater Manchester (including the inner relief road)	1	2	3	4	5	6	7	8
b.	The Inner Relief Route	1	2	3	4	5	6	7	8

The table below shows which vehicles would be non-compliant in the proposed investment-led Greater Manchester Clean Air Plan and therefore eligible for funding to help upgrade to a compliant vehicle. It is important to note that there is no charging Clean Air Zone under these proposals.

Vehicle Type	Emission standards for a non-compliant vehicle	Emission standards for a compliant vehicle
Taxis and private hire vehicles	Euro 5 or earlier diesel engines (typically registered before 2016) Euro 3 or earlier petrol engines (typically registered before 2005)	Euro 6 diesel engines (typically registered before 2016 onwards) Euro 4 or later petrol engines (typically registered 2005 onwards) Ultra-low emission vehicles

Your vehicle registration document (also known as the V5C) will help identify your vehicle's Euro emission standard.

ASK IF S4=1 TAXI (HACKNEY CARRIAGE), SINGLE CODE

A2	In 2022, which of these statements would be true about the hackney carriage(s) you own or lease? (select one only)	Routing / Notes
1.	My hackney carriage / all my hackney carriages will be non-compliant - Euro 5 or earlier (if diesel) or Euro 3 or earlier (if petrol)	
2.	Some of my hackney carriages will be non-compliant - Euro 5 or earlier (if diesel) or Euro 3 or earlier (if petrol)	
3.	My hackney carriage / all my hackney carriages will be compliant (Euro 6 if diesel, Euro 4 or later if petrol OR ultra-low emission vehicles)	
4.	Don't know	

ASK IF S4 = 1 TAXI (Hackney Carriage), SINGLE CODE

A3	Is your hackney carriage or hackney carriage(s) a wheelchair accessible vehicle(s) (WAV)? (Select one only)	Routing notes
1	My hackney carriage /all my hackney carriages are wheelchair accessible	Go to B1
2	Some of my hackney carriages are wheelchair accessible	Go to B1
3	My hackney carriage /all my hackney carriages are not wheelchair accessible	Go to B1
4	Don't know	Go to B1

ASK IF S4=2 PRIVATE HIRE VEHICLE, SINGLE CODE

A4	In 2022, which of these statements would be true about the private hire vehicle(s) you own or lease? (select one only)	Routing / Notes
1.	My Private Hire Vehicle/ all of my Private Hire Vehicles will be non-compliant - Euro 5 or earlier (if diesel) or Euro 3 or earlier (if petrol)	
2.	Some of my Private Hire Vehicles will be non-compliant - Euro 5 or earlier (if diesel) or Euro 3 or earlier (if petrol)	
3.	My Private Hire Vehicle / all of my Private Hire Vehicles will be compliant (Euro 6 if diesel, Euro 4 or later if petrol OR ultra-low emission vehicles)	
4.	Don't know	

SECTION B: PURCHASING VEHICLES

ASK IF S1 = 1 TO 3

RANDOMISE, MULTI CODE

B1	What factors do you or your business consider to be the three most important when purchasing a Taxi or Private Hire Vehicle? (Select a maximum of up to three factors only)	Routing/ notes
1.	Purchase costs	
2.	Age of vehicle	
3.	Running costs/mileage	
4.	Size of engine	
5.	Environmentally friendly/low emissions	
6.	Compliance with Clean Air Zone in Greater Manchester	
7.	Make or model preference	
8.	Interior space/functionality	
9.	Reliability	
10.	Speed/performance	
11.	Specialist adaptations	
12.	Fuel type	
13.	Safety	
14.	Taxi/PHV licensing standards	
15.	Other (please specify)	
16.	Don't know	

SINGLE CODE

B2	When do you next plan to replace your vehicles? Please give a rough estimate (select one only)	Routing/ notes
1	In the next year	
2	In the next two years	
3	In the next three to five years	
4	More than five years from now	
5	Don't know	

SINGLE CODE

B3	When you next replace your vehicle, which type of vehicle(s) do you intend to purchase? (select one only)	Routing/ notes
1.	Petrol	
2.	Diesel	
3.	ZERO Emissions Capable (ZEC) or Electric vehicle	
4.	Plug in hybrid	
5.	Diesel hybrid (non-plug in)	
6.	Petrol hybrid (non-plug in)	
7.	Liquefied Petroleum Gas (LPG) LPG	
8.	Other (specify)	
9.	Don't know	

OPEN

B4	Why would you choose this vehicle type [response @ B3]? (Write in box)	Routing/ notes
1.	Open	Literal

SINGLE CODE

B5	When you next replace a Taxi or Private Hire Vehicle, how old is the vehicle likely to be? (select one only)	Routing/ notes
1.	Brand new	
2.	Up to two years old	
3.	Three to five years old	
4.	Six to ten years old	
5.	More than ten years old	
6.	Don't know	

SINGLE CODE

B6	When you next replace a Taxi or Private Hire Vehicle(s), do you have a price limit in mind? (select one only)	Routing/ notes
1.	£10,000 or less	
2.	£10,001 to £20,000	
3.	£20,001 to £30,000	
4.	£30,001 to £40,000	
5.	£40,001 to £50,000	
6.	£50,000 and above	
7.	Prefer not to say	
8.	Don't know	

SINGLE CODE

B7	How do you intend to purchase your next Taxi or Private Hire Vehicle(s)? (select one only)	Routing/ notes
1.	Outright /pay cash	
2.	On finance (including Hire Purchase)	
3.	On a leasing option	
4.	With a personal loan	

5.	With a business loan	
6.	Other (please specify)	
7.	Don't know	
8.	Prefer not to say	

ASK IF S1 = 1 TO 3

RANDOMISE STATEMENTS

B8	Thinking about replacing or upgrading vehicles over the last two years, how much do you agree or disagree with the following statements? (Select one box per row)	Strongly disagree	Slightly disagree	Neutral	Slightly agree	Strongly agree	Don't know
a.	Taxi trading conditions have impacted how often vehicles are replaced.	1	2	3	4	5	6
b.	I/we have experienced issues replacing vehicles due to the availability of new vehicles	1	2	3	4	5	6
c.	I/we have experienced issues replacing vehicles due to the availability of used vehicles	1	2	3	4	5	6
d.	I/we have delayed replacing vehicles due to the increased costs of purchasing replacements	1	2	3	4	5	6
e.	I/we have delayed replacing vehicles due to uncertainty around the Clean Air Plan and associated funding	1	2	3	4	5	6
f.	Proposals to implement Minimum Licensing Standards (MLS) has impacted my/our decision to replace vehicles	1	2	3	4	5	6
g.	There has been no change to how often I/we have replaced vehicles over the last two years	1	2	3	4	5	6

SECTION C: SUPPORT FOR UPGRADING TO CLEANER VEHICLES

ASK S1= 1 to 3, SINGLE CODE

C1	Do you/your business currently use electric vehicles for Taxi or Private Hire purposes? (Please tick one only)	Routing/ notes
1.	Yes	Go to C5
2.	No	Go to C2

ASK IF C1=2, SINGLE CODE

C2	In principle, would you ever consider buying or leasing an electric vehicle in future? (This could either be new or second-hand.) (select one only)	Routing/ notes
1.	Yes	Go to C3
2.	No	Go to C5
3.	Maybe	Go to C3
4.	Don't know	Go to C5

ASK IF C2 = 1 Yes, OR 3 Maybe, SINGLE CODE

C3	How soon do you think you might consider this? (select one only)	Routing/ notes
1.	In the next year	
2.	In the next two years	
3.	In the next three to five years	
4.	More than five years from now	
6.	Don't know	

ASK IF C2= 1 Yes, or 3 Maybe, MULTI CODE

RANDOMISE

C4	What might encourage you to buy one? (select all that apply)	Routing/ notes
1.	If I knew more about them (generally)	
2.	If more people were using them already	
3.	If they were cheaper to buy	
4.	If they were cheaper to run/maintain	
6.	If I wanted to be more environmentally friendly	
7.	If I felt I was buying the latest/up-to-date technology	
8.	If the range of make/models available improved	
9.	If more public charging points were available	
10.	If more dedicated taxi charging points were available	
11.	If charging points were available at my home	
12.	If there were financial incentives for using one	
13.	If petrol or diesel vehicles became more expensive to run	
14.	Other (please specify)	
15.	No reasons	Exclusive

ASK IF S1= 1 to 3, SINGLE CODE

C5	If funding was available to retrofit or upgrade vehicles under a non-charging Clean Air Plan, would you..? (select one only)	Routing/ notes
1.	Consider applying for available funding	Go to C8
2.	Would not consider applying for available funding	Go to C6
3.	Don't know	Go to C7

ASK IF C5 = 2, OPEN

C6	What are the barriers (if any) to you applying for funding? [Write in box]	Routing/ notes
	Open	Go to C7

ASK IF S1=4 – organisation representing taxi trade only

C7	Do you have any comments about what funding should be available to retrofit or upgrade vehicles under a non-charging Clean Air Plan? (Write in box)	Routing/ notes
1.	Open	Go to C8

ASK IF S1 = 1 to 4. OPEN

C8	Are there other measures that you think could help encourage vehicle owners to upgrade to cleaner vehicles? (Write in box)	Routing/ notes
1.	Open	

ASK IF S1 – 1 to 4. OPEN

C10	Do you have any other comments on replacing/upgrading vehicles not covered elsewhere? (Write in box)	Routing/ notes
1.	Open	

BUSINESS CONTEXT**ASK S1, 1 to 3**

BC1a	Please provide the name of your organisation / business? [Write in box]	Routing/ notes
	Open	

ASK IF S1= 2 or 3, licensed driver

BC1	Has the number of call bookings/journeys you make each day changed since pre-Covid (2019)? (select one only)	Routing/ notes
1.	Yes, more call bookings/journeys are made per day	
2.	Yes, less call bookings/journeys are made per day	
3.	No, the number of call bookings/journeys made per day are about the same	
4.	Not applicable – I did not make these journeys	
6.	Don't know	
7.	Prefer not to say	

ASK S1 =1 to 4, SINGLE CODE

BC2	Where is your business or organisation registered? (Select one only)	Routing/ notes
1.	Bolton	
2.	Bury	
3	Manchester	
4	Oldham	
5	Rochdale	
6	Salford	
7	Stockport	
8	Tameside	
9	Trafford	
10	Wigan	
11	Outside Greater Manchester (please specify)	

ASK S1 =1, SINGLE CODE

BC3	How many taxi drivers do you employ, including any sub-contractors? (Select one only)	Routing/ notes
1.	Sole trader or self-employed	
2.	Micro business (1-9 employees)	
3.	Small business (10-49 employees)	
4.	Medium business (50-249 employees)	
5.	Large business (250 plus employees)	
6.	Don't know	

ASK S1 = 1, SINGLE CODE

BC4	Have you responded to this questionnaire as..? (Select one only)	Routing/ notes
1.	Someone responsible for making financial decisions within the business	
2.	Someone not responsible for making financial decisions within the business	

DEMOGRAPHICS

ASK IF S1 = 2 or 3 – Licensed drivers, or sole traders BC2=1 ONLY
SINGLE CODE

D1	How old are you? (select one only)	Routing/ notes
2.	18-24	
3.	25-34	
4.	35-44	
6.	45-54	
7.	55-64	
8.	65-74	
9.	75 and over	
10.	Prefer not to say	

SINGLE CODE

D2	Which of the following options describes your gender? (select one only)	Routing/ notes
1.	Man (including Trans Man)	
2.	Woman (including Trans Woman)	
3.	Non-binary	
4.	In another way	
5.	Prefer not to say	
6.	Other gender (please provide details):	

D3	What is your ethnic group? (select one only)	Routing/ notes
1.	Asian or Asian British - Bangladeshi	
2.	Asian or Asian British- Chinese	
3.	Asian or Asian British - Indian	
4.	Asian or Asian British - Pakistani	
5.	Asian or Asian British – Any other Asian background	
6.	Black or Black British - African	
7.	Black or Black British – Caribbean	
8.	Black or Black British – Any other Black background	
9.	Mixed – White and Asian	
10.	Mixed – White and Black African	
11.	Mixed – White and Black Caribbean	
12.	Mixed – Any other mixed background	
13.	White – English/Welsh/Scottish/Northern Irish/British	
14.	White – Eastern European	

15.	White – Gypsy or Irish Traveller		SINGLE CODE
16.	White – Irish		
17.	White – Any other White background		
18.	Other ethnic group – Arab		
19.	Other ethnic group – Other		
20.	Prefer not to say		

SINGLE CODE

D4	What is your religion? (select one only)	Routing/notes
1.	Buddhism	
2.	Christianity	
3.	Hinduism	
4.	Judaism	
5.	Islam	
6.	Sikhism	
7.	Other religion	
8	No religion	
9.	Prefer not to say	

D5	Are your day-to-day activities limited because of a long-term health problem, impairment or disability? (select all that apply)	Routing/notes
1.	No	
2.	Yes, mobility impairment	
3.	Yes, hearing impairment	
4.	Yes, visual impairment	
5.	Yes, mental health condition	
6.	Yes, learning disability	
7.	Yes, lung condition/breathing difficulties	
8	Other (open box)	
9.	Prefer not to say	

ASK ALL
POSTCODE

D6c	What is your home postcode? [Write in box]	Routing/notes
	Open	

F1	TfGM and its partners may conduct further research into people's views on the Clean Air Plan. Are you willing to be contacted by TfGM or one of its partners to take part in this research? (Select one only)	Routing/notes
1.	Yes	
2.	No	

F2	TfGM and its partners may conduct further research about other transport or environment-related topics. Are you willing to be contacted by TfGM or one of its partners to take part in this research? (Select one only)	Routing/notes
1.	Yes	
2.	No	

F2	If yes, please give your preferred contact details below:	Routing/ notes
1.	Name	
2.	Telephone number	
3.	Email	

Thank you for completing this survey

Your input will help Greater Manchester's (GM's) local authorities develop and assess a package of measures to form the proposed new GM Clean Air Plan.

A public consultation on the Clean Air Plan proposals will take place in early 2023, subject to government feedback.

If you have any enquiries about the Greater Manchester Clean Air Plan, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available). To sign up for updates as the new plan is developed, including notification of future consultation visit: cleanairgm.com/#newsletter.

On completion go to [Home | Clean Air Greater Manchester \(cleanairgm.com\)](https://cleanairgm.com)

For those not eligible:

Thank you for your interest in this survey.

Unfortunately, your answers show that you are not eligible to respond. A public consultation on the Clean Air Plan proposals will take place in early 2023, subject to government feedback.

If you have any enquiries about the Greater Manchester Clean Air Plan, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available).

To sign up for updates as the new plan is developed, including notification of future consultation visit: cleanairgm.com/#newsletter.

A.2 HGV and Coach

Introduction

Greater Manchester (GM) local authorities are undertaking a participatory policy development process to develop and shape the new Clean Air Plan Policy, including proposals for funding support.

The case for a new plan, which has been submitted to Government, sets out evidence supporting an investment-led approach, with no charging Clean Air Zone, to address the city-region's nitrogen dioxide air pollution problem. This is to ensure the right funding and eligibility criteria are in place to enable category B vehicles, which includes buses, coaches, taxis, PHVs and HGVs, to be upgraded to those with cleaner engines, while mitigating any additional economic risk or hardship to residents and businesses.

To ensure the development of the new policy is well-grounded in evidence, GM wants the input of key stakeholders, including **HGV and Coach owners**, and are seeking responses to this survey **which runs between Monday 5 September and Monday 10 October 2022**.

This survey is being conducted by AECOM, an independent research company, on behalf of Transport for Greater Manchester. Transport for Greater Manchester (which is also known as TfGM) is carrying out research on vehicle fleets, vehicle upgrades and views on funding to upgrade to cleaner vehicles, to help inform the development of a new investment-led Clean Air Plan. Your feedback will be used to inform the policy development process.

Participation is entirely voluntary. **The survey will take around 15 minutes**. It will be carried out according to the Market Research Society's Code of Conduct and Data Protection Laws.

Privacy Notice

AECOM will process your personal data on behalf of TfGM (data controller) because it is necessary for a task carried out in the public interest, exercising TfGM's functions under s10A of the Transport Act 1968. We process your special category personal data because it is necessary for reasons of substantial public interest for equality of opportunity or treatment. Any personal data you provide will

be held in strict confidence and stored securely and in accordance all legislation governing the protection of personal information, including the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). Data collected from this survey will be aggregated, so you will not be identified. Anonymised data will be shared with local authorities, academic institutions or contractors working on behalf of TfGM for the development of the Clean Air Plan and research purposes. All survey responses containing personal data will be deleted within two years of the closure of the survey. Further details of how TfGM process your data and for details of how you can exercise your rights are available at tfgm.com/privacy-policy or from the Data Protection Officer by emailing data.protection@tfgm.com. For AECOM's privacy policy, please visit aecom.com/privacy-policy or email privacyquestions@aecom.com. Further information about data privacy and your rights under the General Data Protection Regulation (the "GDPR") can be found at the ICO website (data protection regulator) ico.org.uk/for-the-public. As a reminder, please complete the survey by **Monday 10 October 2022**. If you have queries or need help completing the survey, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available).

[Consent to continue]

SCREENER QUESTIONS

S1	The ten Greater Manchester local authorities are Bury, Bolton, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan. Are you responding as a? (select one only)	Routing/ notes
1.	Business based inside Greater Manchester (including self-employed and sole traders)	S2
2.	Business based outside Greater Manchester that travels into Greater Manchester (including self-employed, sole traders)	S2
3.	Organisation based in Greater Manchester (e.g. charities, trade organisations, government bodies)	S2
4.	Organisation based outside Greater Manchester (e.g. charities, trade organisations, government bodies)	S2
5.	None of the above	Screen out

ASK ALL MULTI

S2	Which of the following types of vehicles does your business/organisation operate?. (Please select all that apply)	Routing / Notes
1.	Buses (registered on local routes)	Screen out if no other option selected
2.	Buses (not registered on routes)	Screen out if option S2=>3not selected
3.	Coaches	S3
4.	Heavy Goods Vehicles (HGVs) to move supplies or, make deliveries, removals etc.	S3
5.	Specialist equipment, classified as a Heavy Goods Vehicle (HGV)	S3
6.	None of the above	Screen out

ASK IF S2= Specialist equipment (code 4)

OPEN (SMALL BOX)

S2a	What type of specialist HGV does your business/organisation operate?
-----	--

ASK IF S2=3

S3	Do you operate coaches to make pick-ups/drop -offs within Greater Manchester? (select one only)	Routing / Notes
1.	Yes	Go to S4
2.	No	

Screen out if S3=2 AND S1=2 or 4

ASK IF S2=3 and S3=1

S4	How many coaches does your business/organisation operate across Greater Manchester? (select one only)							Routing / Notes
		None	1	2-4	5-9	10-19	20+	
1.	Coach	Screen out						Go to A1

ASK IF S2=4 or 5

S6	How many company vehicles does your business/organisation operate across Greater Manchester? (select one only)							Routing / Notes
		None	1	2-4	5-9	10-19	20+	
1.	Heavy Goods Vehicle	Screen out						Go to A2
2.	Specialist equipment, classified as a Heavy Goods Vehicle (HGV)	Screen out						Go to A2

SECTION A: YOUR VEHICLE(S) AND USAGE IN AND AROUND GREATER MANCHESTER

The Inner Relief Route (also known as the Inner Ring Road) is a circular route in the Manchester & Salford areas made up of several roads including the Mancunian Way, Trinity Way and Great Ancoats Street/A665)

ASK IF S3=1

A1	You told us you operate [number S4=1 coaches] across Greater Manchester, how many vehicles operate within the Inner Relief Route? (Please give your best estimate)								Routing / Notes
		None	1	2-4	5-9	10-19	20+	All coaches	
1.	Coach								Go to A3

The Inner Relief Route (also known as the Inner Ring Road) is a circular route in the Manchester & Salford areas made up of several roads including the Mancunian Way, Trinity Way and Great Ancoats Street/A665)

ASK IF S6=1

A2	You told us you operate [number S6=1 Heavy Goods Vehicles] across Greater Manchester, how many vehicles operate within the Inner Relief Route? (Please give your best estimate)								Routing / Notes
		None	1	2-4	5-9	10-19	20+	All Heavy Goods vehicles	
1.	Heavy Goods Vehicle								Go to A3b
2.	Specialist equipment, classified as a Heavy Goods Vehicle (HGV)								Go to A3c

ASK If COACH S4 (Coaches) ONLY SHOW b IF A1>NONE

A3a	On average, how often does your business operate coaches within...? Please give your best estimate	7 days a week	5 or 6 days a week	2 to 4 days a week	Once a week	Once every two weeks	Once a month	Less frequently	Don't know/N or applicable
a.	Greater Manchester	1	2	3	4	5	6	7	8
b.	The Inner Relief Route	1	2	3	4	5	6	7	8

ASK IF HGV S6 (HGV) ONLY SHOW b IF A2>NONE

A3b	On average, how often does your business operate HGVs within...? Please give your best estimate	7 days a week	5 or 6 days a week	2 to 4 days a week	Once a week	Once every two weeks	Once a month	Less frequently	Don't know/Not applicable
a.	Greater Manchester	1	2	3	4	5	6	7	8
b.	The Inner Relief Route	1	2	3	4	5	6	7	8

ASK IF HGV S6 (SPECIALISED HGV) ONLY SHOW b IF A2>NONE

A3c	On average, how often does your business operate specialised HGVs within...? Please give your best estimate	7 days a week	5 or 6 days a week	2 to 4 days a week	Once a week	Once every two weeks	Once a month	Less frequently	Don't know/Not applicable
a.	Greater Manchester	1	2	3	4	5	6	7	8
b.	The Inner Relief Route	1	2	3	4	5	6	7	8

The table below shows which vehicles would be non-compliant in the proposed investment-led Greater Manchester Clean Air Plan and therefore eligible for funding to help upgrade to a compliant vehicle. It is important to note that there is no charging Clean Air Zone under these proposals.

Vehicle Type	Emission standards for a non-compliant vehicle	Emission standards for a compliant vehicle
Buses and coaches	Euro 5 or earlier engines (typically registered before 2013)	Euro 6 (typically registered 2013 onwards) Ultra-low emission vehicles
HGVs	Euro 5 or earlier engines (typically registered before 2013)	Euro 6 (typically registered 2013 onwards)

Your vehicle registration document (also known as the V5C) will help identify your vehicle's Euro emission standard.

ASK IF S3=1 COACH, SINGLE CODE

A3	In 2022, which of these statements would be true about the Coach you own or lease? (select one only)	Routing / Notes
1.	My coach or all my coaches will be non-compliant (Euro 5 or earlier)	Go to B1
2.	Some of my coaches will be non-compliant (Euro 5 or earlier)	Go to B1
3.	My coach or all my coaches will be compliant (Euro 6)	Go to B1
4.	Don't Know	Go to B1

ASK IF S5 = 1 HEAVY GOODS VEHICLE (HGV) OR 2 SPECIALISED EQUIPMENT CLASSED AS HGV, SINGLE CODE

A2	In 2022, which of these statements would be true about the Heavy Goods Vehicle(s) (HGVs) you own or lease? (select one only)	Routing / Notes
1.	My Heavy Goods Vehicle/ all of my Heavy Goods Vehicles will be non-compliant (Euro 5 or earlier)	Go to B1
2.	Some of my Heavy Goods Vehicles will be non-compliant (Euro 5 or earlier)	Go to B1
3.	My Heavy Goods Vehicle/ all my Heavy Goods Vehicles will be compliant (Euro 6)	Go to B1
4.	Don't Know	Go to B1

SECTION B: PURCHASING VEHICLES

ASK IF S3=1

RANDOMISE, MULTI CODE

B1	What factors do you or your business consider to be the most important when purchasing a coach? <i>(Select a maximum of up to three factors only)</i>	Routing/ notes
1.	Purchase costs	
2.	Age of vehicle	
3.	Running costs/mileage	
4.	Size of engine	
5.	Environmentally friendly	
6.	Low emissions / emissions low enough to comply with Clean Air Zones across the UK	
7.	Make or model preference	
8.	Interior space/functionality	
9.	Reliability	
10.	Speed/performance	
11.	Specialist adaptations	
12.	Fuel type	
13.	Safety	
14.	Other (please specify)	
15.	Don't know	

ASK IF S2=4 (HGV)

B1	What factors do you or your business consider to be the most important when purchasing a Heavy Goods Vehicle? <i>(Select a maximum of up to three factors only)</i>	Routing/ notes
1.	Purchase costs	
2.	Age of vehicle	
3.	Running costs/mileage	
4.	Size of engine	
5.	Environmentally friendly	
6.	Low emissions / emissions low enough to comply with Clean Air Zones across the UK	
7.	Make or model preference	
8.	Interior space/functionality	
9.	Reliability	
10.	Speed/performance	
11.	Specialist adaptations	
12.	Fuel type	
13.	Safety	
14.	Other (please specify)	
15.	Don't know	

ASK IF S3=1
SINGLE CODE

B2a	When you next replace a coach, which type of vehicle do you intend to purchase? (select one box only)	Routing/notes
1.	Petrol	
2.	Diesel	
3.	LPG	
4.	Other (specify)	

ASK IF S2=4 (HGV)

B2a	When you next replace a Heavy Goods Vehicle which type of vehicle do you intend to purchase? (select one box only)	Routing/notes
1.	Petrol	
2.	Diesel	
3.	LPG	
4.	Other (specify)	

ASK IF S3=1 and S5=1

OPEN

B2b	Why would you choose this vehicle type [response @B2a]? (Write in box)	Routing/notes
1.	Open	Literal

ASK IF S3=1
SINGLE CODE

B3	When you next replace a coach, what age is this likely to be? (select one only)	Routing/notes
1.	Brand new	
2.	Up to two years old	
3.	Three to five years old	
4.	Six to ten years old	
5.	More than ten years old	
6.	Don't know	

ASK IF S2=4 (HGV)

B3	When you next replace a Heavy Goods Vehicle, what age is this likely to be? (select one only)	Routing/notes
1.	Brand new	
2.	Up to two years old	
3.	Three to five years old	
4.	Six to ten years old	
5.	More than ten years old	
6.	Don't know	

ASK IF S3=1 COACH, SINGLE CODE

B4	When you next replace a coach, do you have a price limit in mind? (select one only)	Routing/ notes
1.	£20,000 or less	Go to B6
2.	£20,000-£55,000	Go to B6
3.	£55,001-£100,000	Go to B6
4.	£100,001-£225,000	Go to B6
5.	Over £225,000	Go to B6
6.	Prefer not to say	Go to B6
7.	Don't know	Go to B6

ASK IF S5=1 HGV, SINGLE CODE

B5	When you next replace a Heavy Goods Vehicle, do you have a price limit in mind? (select one only)	Routing/ notes
1.	£10,000 or less	
2.	£10,001-£30,000	
3.	£30,001-£60,000	
4.	£60,001-£100,000	
5.	£100,001 and above	
7.	Prefer not to say	
8.	Don't know	

ASK IF S3=1 (COACH)

B6	How do you intend to purchase your next coach(es)? (select one only)	Routing/ notes
1.	Outright /pay cash	
2.	On finance (including Hire Purchase)	
3.	On a leasing option	
4.	With a personal loan	
5.	With a business loan	
6.	Other (please specify)	
7.	Don't know	
8.	Prefer not to say	

ASK IF S2=4 (HGV)

B6	How do you intend to purchase your next Heavy Goods Vehicle(s)? (select one only)	Routing/ notes
1.	Outright /pay cash	
2.	On finance (including Hire Purchase)	
3.	On a leasing option	
4.	With a personal loan	

5.	With a business loan	
6.	Other (please specify)	
7.	Don't know	
8.	Prefer not to say	

ASK IF S3=1 (COACH) OR S6=1 (HGV) OR S6=2 (SPECIALISED HGV),
RANDOMISE STATEMENTS

B7	Thinking about replacing or upgrading vehicles over the last two years, how much do you agree or disagree with the following statements? (Select one box per row)	Strongly disagree	Slightly disagree	Neutral	Slightly agree	Strongly agree	Don't know
a.	Market conditions have impacted how often vehicles are replaced.	1	2	3	4	5	6
b.	I/we have experienced issues replacing vehicles due to the availability of new vehicles	1	2	3	4	5	6
c.	I/we have experienced issues replacing vehicles due to the availability of used vehicles						
d.	I/we have delayed replacing vehicles due to the increased costs of purchasing replacements	1	2	3	4	5	6
e.	I/we have delayed replacing vehicles due to uncertainty associated with the Clean Air Plan						
f.	There has been no change to how often I/we have replaced vehicles over the last two years	1	2	3	4	5	6

SECTION C: SUPPORT FOR UPGRADING TO CLEANER VEHICLES

ASK IF S5= 1 – Heavy Goods Vehicle only, SINGLE CODE

C1	Have you heard of the Clean Commercial Vehicle Fund (which includes funding for HGVs) agreed under the previous Greater Manchester Clean Air Plan, which opened November 2021? (select one only)	Routing/ notes
1.	Yes, and applied for funding	Go to C2
2.	Yes, but have not applied for funding	Go to C3
3.	No, not heard of the HGV fund.	Go to C7
7.	Don't know	Go to C7

ASK IF C1= 1, OPEN

C2	Do you have any comments on the Clean Commercial Vehicle (HGV) Fund or suggestions on how this can be improved? [Write in box]	Routing/ notes
	Open	Go to C7

ASK IF C1=2, OPEN

C3	Why have you not applied for this funding? [Write in box]	Routing/ notes
	Open	Go to C7

ASK IF S3= 1 – Coach, SINGLE CODE

C4	If funding was available to retrofit or upgrade coaches under a non-charging Clean Air Plan, would you..? (select one only)	Routing/ notes
1.	Consider applying for available funding	Go to C6
2.	Would not consider applying for available funding	Go to C5
7.	Don't know	Go to Q17

ASK IF C4= 2, OPEN

C5	What are the barriers (if any) to you applying for funding? [Write in box]	Routing/ notes
	Open	Go to C6

ASK IF C4=1 or 7, OPEN

C6	Do you have any comments on funding to retrofit/upgrade coaches? [Write in box]	Routing/ notes
	Open	Go to C7

ASK ALL VEHICLE TYPES. OPEN

C7	Are there other measures that you think could help encourage vehicle owners to upgrade to cleaner vehicles? (Write in box)	Routing/ notes
1.	Open	Literal

ASK ALL VEHICLE TYPES. OPEN

C9	Do you have any other comments on replacing/upgrading vehicles not covered elsewhere? (Write in box)	Routing/ notes
1.	Open	Literal

BUSINESS CONTEXT

ASK S1, 1 to 4

BC1a	Please provide the name of your organisation / business? [Write in box]	Routing/ notes
	Open	

ASK S1, 1 to 4

BC1b	Where is your business or organisation registered? (Select one only)	Routing/ notes
1.	Bolton	
2.	Bury	
3	Manchester	
4	Oldham	
5	Rochdale	
6	Salford	
7	Stockport	
8	Tameside	
9	Trafford	

10	Wigan	
11	Outside Greater Manchester (please specify)	

ASK S1, 1 to 4**POSTCODE**

BC1c	What is your registered business postcode? [Write in box]	Routing/ notes
	Open	

BC2	Which of the following best describes your business or organisation? (Select one only)	Routing/ notes
1.	Sole trader or self-employed	
2.	Micro business (1-9 employees)	
3.	Small business (10-49 employees)	
4.	Medium business (50-249 employees)	
5.	Large business (250 plus employees)	
6.	Don't know	

BC3	And which sector does your business operate in? (Select one only)	Routing/ notes
1.	Agriculture, forestry, and fishing	
2.	Accommodation and food services	
3.	Arts, entertainment, recreation and other	
4.	Business administration and support services	
5.	Construction	
6.	Education	
7.	Financial and insurance	
8.	Health	
9.	Information and communication	
10.	Manufacturing	
11.	Mining, quarrying and utilities	
12.	Motor trades	
13.	Professional, scientific, and technical	
14.	Property	
15.	Public administration and defence	
16.	Retail	
17.	Transport and storage	
18.	Wholesale	

BC4	Have you responded to this questionnaire as..? (Select one only)	Routing/notes
1.	Someone responsible for making financial decisions within the business	
2.	Someone not responsible for making financial decisions within the business	
3.	Prefer not to say	

DEMOGRAPHICS - ONLY ASK INDIVIDUALS, SOLE TRADERS ONLY BC2=1
SINGLE CODE

D1	How old are you? (select one only)	Routing/notes
2.	18-24	
3.	25-34	
4.	35-44	
6.	45-54	
7.	55-64	
8.	65-74	
9.	75 and over	
10.	Prefer not to say	

SINGLE CODE

D2	Which of the following options describes your gender? (select one only)	Routing/notes
1.	Man (including Trans Man)	
2.	Woman (including Trans Woman)	
3.	Non-binary	
4.	In another way	
5.	Prefer not to say	
6.	Other gender (please provide details):	

SINGLE CODE

D3	What is your ethnic group? (select one only)	Routing/notes
1.	Asian or Asian British - Bangladeshi	
2.	Asian or Asian British- Chinese	
3.	Asian or Asian British - Indian	
4.	Asian or Asian British - Pakistani	
5.	Asian or Asian British – Any other Asian background	
6.	Black or Black British - African	
7.	Black or Black British – Caribbean	
8.	Black or Black British – Any other Black background	
9.	Mixed – White and Asian	
10.	Mixed – White and Black African	
11.	Mixed – White and Black Caribbean	
12.	Mixed – Any other mixed background	
13.	White – English/Welsh/Scottish/Northern Irish/British	
14.	White – Eastern European	
15.	White – Gypsy or Irish Traveller	
16.	White – Irish	
17.	White – Any other White background	
18.	Other ethnic group – Arab	
19.	Other ethnic group – Other	
20.	Prefer not to say	

SINGLE CODE

D4	What is your religion? (select one only)	Routing/ notes
1.	Buddhism	
2.	Christianity	
3.	Hinduism	
4.	Judaism	
5.	Islam	
6.	Sikhism	
7.	Other religion	
8	No religion	
9.	Prefer not to say	

SINGLE CODE

D5	Are your day-to-day activities limited because of a long-term health problem, impairment or disability? (select all that apply)	Routing/ notes
1.	No	
2.	Yes, mobility impairment	
3.	Yes, hearing impairment	
4.	Yes, visual impairment	
5.	Yes, mental health condition	
6.	Yes, learning disability	
7.	Yes, lung condition/breathing difficulties	
8	Other (open box)	
9.	Prefer not to say	

D6	Which district of Greater Manchester do you live in? (Select one only)	Routing/notes
1.	Bolton	
2.	Bury	
3	Manchester	
4	Oldham	
5	Rochdale	
6	Salford	
7	Stockport	
8	Tameside	
9	Trafford	
10	Wigan	
11	Outside Greater Manchester (please specify)	

ASK ALL

F1	TfGM and its partners may conduct further research into people's views on the Clean Air Plan. Are you willing to be contacted by TfGM or one of its partners to take part in this research? (Select one only)	Routing/ notes
1.	Yes	
2.	No	

F2	TfGM and its partners may conduct further research about other transport or environment-related topics. Are you willing to be contacted by TfGM or one of its partners to take part in this research? (Select one only)	Routing/ notes
1.	Yes	
2.	No	

F2	If yes, please give your preferred contact details below:	Routing/ notes
1.	Name	
2.	Telephone number	
3.	Email	

Thank you for completing this survey

Your input will help Greater Manchester's (GM's) local authorities develop and assess a package of measures to form the proposed new GM Clean Air Plan.

A public consultation on the Clean Air Plan proposals will take place in early 2023, subject to government feedback.

If you have any enquiries about the Greater Manchester Clean Air Plan, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available)
To sign up for updates as the new plan is developed, including notification of future consultation visit: cleanairgm.com/#newsletter.
On completion go to [Home | Clean Air Greater Manchester \(cleanairgm.com\)](https://cleanairgm.com)

For those not eligible:

Thank you for your interest in this survey.

Unfortunately, your answers show that you are not eligible to respond. A public consultation on the Clean Air Plan proposals will take place in early 2023, subject to government feedback.

If you have any enquiries about the Greater Manchester Clean Air Plan, please contact info@cleanairgm.com or call 0161 244 1333 (support for non-English speakers is available)

To sign up for updates as the new plan is developed, including notification of future consultation visit: cleanairgm.com/#newsletter.

Appendix B List of stakeholders who cascaded the online survey

The list below shows the representatives who supported by cascading the online survey link to their members.

Where it says taxi trade it means those who took part in the Hackney and PHV engagement sessions. The survey link was sent to all licensing managers who shared it with their trade.

Taxi industry

- All trade representatives who participated in targeted engagement sessions for hackney carriage and private hire vehicles;
- Licensing managers for each Local Authority; and
- Neighbouring local authorities

HGV and Coach

- Business facing Local Authority groups;
- Business Representative Organisations;
- Road Haulage Association;
- Confederation of Passenger Transport;
- GM Freight Forum; and
- Freight companies Greater Manchester

Other respondents willing to be contacted for future research

- Previous HGV funding applicants;
- Clean Air mailing list – HGV; and
- Clean Air mailing list – Coach

Appendix C Discussion guides

Taxi

Clean Air Plan Discussion Guide – Taxi / PHV / Operator

All respondents will:

- own at least 1 non-compliant vehicle

*This topic guide has been designed to provide structure to the interviews – it is **NOT intended to be used as a script**. To help the moderator, prompts have been included (throughout the guide see 'PROBE'); these are suggestions of questions that can be asked if appropriate to probe deeper into the respondents' views.*

Introduction

- Self/ AECOM/independent consultancy and conducting research on behalf of TfGM
- Conducting research on behalf of the Transport for Greater Manchester (TfGM) who are acting on behalf of the 10 Local Authorities
- Emphasise there are no right or wrong answers
- Emphasise confidentiality – recording interview for accuracy of reporting. Recording will not be passed on to anyone outside the research team or the client team. Findings are aggregated for reporting. Stress anonymity in reporting of findings.
 - No mobiles
 - How the discussion will work (contributing to discussions, materials being shared);
 - Consent form check

Taxi/PHV Drivers/Operators

- Name
- Area licenced/operate
- Area(s) they work in/across
- Vehicle(s) owned/ leased/ used
- Current levels of compliance with vehicles

5 mins

Current vehicle market and vehicle upgrade

- How would they describe the current trading conditions in their sector in the last 12 months?
 - PROBE: Is it thriving/okay/struggling?
 - Why do they say that?
- How often do they renew their vehicle / fleet of vehicles?

- When did they last change their vehicle(s)?
 - Why?/ Why not?
- When do they next expect to change their vehicle(s)?
 - PROBE: Why do they need/ want to change their vehicle(s)?
- What is influencing that decision? That timescale?
 - PROBE: What has impacted the decision?
 - Covid-19? Vehicle availability? Recession? Economy? Electric infrastructure / vehicles? Energy crisis? Cost of living crisis?
 - PROBE: Why?
 - PROBE: What is their usual plan / timescale for changing vehicle(s)?
- When they next change their vehicle(s), what are they looking at?
 - PROBE: Why do they say that?
 - PROBE: Type of vehicle? Make? Model?
 - PROBE: Fuel Type?
 - PROBE: Due to Emissions standards?
 - PROBE: Have they experienced any issues with buying / replacing vehicles?
 - PROBE: For new vehicles?
 - PROBE: For used vehicles?
 - Why do they say that?
- If no issue with availability, then probe as to whether they think it is in an issue? Have they heard anything from other drivers?
- Have you experienced/experienced issues with vehicle affordability?
 - PROBE: For new vehicles?
 - PROBE: For used vehicles?
 - Why do you say this? What additional information can they give about this situation?

15 mins

Awareness

- Are they aware of the proposed Clean Air Plan In Greater Manchester?
 - If yes, what is it? Moderator to note if they are describing the old proposals or new proposals or a mix of the two
 - How did they hear about it?
 - What do they think is happening now? Any awareness of new plans being drawn up?
 - If no, then moderator to provide more information?

MODERTOR READ OUT/SHOW INFORMATION FROM CURRENT INFORMATION SHEET PROVIDED BY TfGM

- Explain about the plan and that its being developed in consultation
- What do they think of the proposal?

- PROBE: Positives? Negatives? Their stance on it?
- What impact do they think the CAP will have on them?
 - Their business?
 - Their customers/clients?
 - On those with affected vehicles?
 - Impact on Operators vs Drivers?
 - Drivers who own vs drivers who rent?
 - Those licensed outside of GM who trade within GM?
Probe – to what extent will they be impacted?

- Will their next vehicle(s) be compliant?
 - Why? Why not?

COMPLIANCE IS BASED ON THE FOLLOWING:

- Vehicle type and its emission standards
- Fuel type (e.g. diesel or petrol)

Minimum emission standards

Each vehicle type has a minimum emission standard. You can find your vehicle’s emission standard in your vehicle log book or from your vehicle manufacturer.

To avoid being charged in a clean air zone, your vehicle must meet the following minimum standard:

Vehicle type	Clean air zone minimum standard
Buses, coaches, heavy goods vehicles	Euro VI
Vans, minibuses, taxis, private hire vehicles, cars	Euro 6 (diesel) and Euro 4 (petrol)
Motorcycles	Euro 3

- What are their thoughts on funding being provided to retrofit or upgrade vehicles under a non-charging Clean Air Plan?
 - PROBE: How would this affect their timelines for changing their vehicle(s)?
- If funding was provided, would they retrofit or upgrade?
 - PROBE: If not, why not?
 - PROBE: Dependent on the amount of funding available?

10 mins

Funding

- Were they aware of the Clean Taxi Fund, as agreed in 2021?
 - If yes, how? What do they think of it?
 - If no, then moderator to explain

MODERATOR TO SHOW

2021 Clean Taxi Fund

Measure	Hackney/PHV
Replacement grant	£5k – compliant WAV Up to £10k – new ZEC WAV (running costs) £10k – second-hand ZEC WAV £3k – compliant non-WAV £6k – new ZEC non-WAV (running costs) £6k – second-hand ZEC non-WAV £5k – minibus
Retrofit grant	Up to £5k
Vehicle Finance	Up to £5k – compliant WAV Up to £10k – new or second-hand ZEC WAV Up to £3k – compliant non-WAV Up to £6k – new or second-hand ZEC non-WAV
Eligibility & Vehicle cap	GM-licensed, 5 vehicles (Tranche 1: limited to 1 vehicle)

- What do they think about this fund?
 - PROBE: Thoughts on amounts? Criteria? Eligibility?
- Would they use this fund?
 - If yes, why?
 - If no, why not?
- What type of vehicle would they upgrade to?
 - PROBE: Does the funding inform that decision? Will they upgrade to that vehicle regardless?
 - PROBE: Does it make a difference to the vehicle they said they would upgrade to earlier?
 - PROBE: What detail on the funding is important to them to know?
- How would they adapt this fund now to suit the current proposal of a non-charging clean air plan?
- What needs to be included in the funding to help encourage businesses to upgrade?

MODERATOR READ OUT: •Funding needs to be targeted to ensure highest possible levels of compliance. There are a number of ways GM could do this, e.g. targeting funding at the vehicles that travel most frequently past the areas of poorest air quality or targeting funds at those more likely to take up the offer to upgrade to a compliant vehicle.

- What do they think is the best way of targeting the funding?
- Why is that?
- What is going to encourage people to change their vehicle(s)?
- Will they change their vehicle?

15 mins

Cameras

- Are they aware of how the proposed non-charging clean air plan will work? (How GMCA will monitor compliant / non-compliant vehicles)?
 - If yes, how?
 - If no, then can they guess?

MODERATOR TO READ OUT/SHOW

*Use of ANPR cameras to identify non-compliant vehicles

- What do they think about using ANPR cameras for this purpose?
 - PROBE: what do they like?
 - PROBE: what do they dislike?
 - PROBE: Data privacy? Number of cameras? Cost?
 - PROBE: why do they say this?
- Will this help encourage people to upgrade?
 - If yes, why?
 - If no, why not?

5 mins

Other measures

- How else can NO₂ be reduced in the region? What else can be done to reduce those levels?
- Are there any other measures that could help taxi / PHV owners to upgrade to cleaner vehicles?
- If yes, what measures?
- If no, why is that?

Wrap up

- What is the one point that they have talked about they would like the “clean air team” to take away when developing the new plan?
 - Why do they say this?
- What is the best way to get updates on the GM CAP to them?

5 mins

HGV and Coach

Clean Air Plan Discussion Guide - HGV

All respondents will:

- own at least 1 non-compliant vehicle

*This topic guide has been designed to provide structure to the interviews – it is **NOT intended to be used as a script**. To help the moderator, prompts have been included (throughout the guide see 'PROBE'); these are suggestions of questions that can be asked if appropriate to probe deeper into the respondents' views.*

Introduction

- Self/ AECOM/independent consultancy and conducting research on behalf of TfGM
- Conducting research on behalf of the Transport for Greater Manchester (TfGM) who are acting on behalf of the 10 Local Authorities
- Emphasise there are no right or wrong answers
- Emphasise confidentiality – recording interview for accuracy of reporting. Recording will not be passed on to anyone outside the research team or the client team. Findings are aggregated for reporting. Stress anonymity in reporting of findings.
 - No mobiles
 - How the discussion will work (contributing to discussions, materials being shared);
 - Consent form check

Business Information

- Name
- Where is the business based? What sector is it in?
- What is their customer base like?
- What vehicles do they own/ lease? Number of vehicles?
- Current age of vehicles?
- Frequency of use with the vehicle

If outside GM, how often they travel into GM? For what journey purposes?

5 mins

Current vehicle market and vehicle upgrade

- How would they describe the current market conditions in their sector in the last 12 months?
 - PROBE: Is it thriving/okay/struggling?

- Why do they say that?
- How often do they renew their fleet of vehicles typically?
- When did they last change their vehicle(s)?
 - Why?/ Why not?
- When do they next expect to change their vehicle(s)?
 - PROBE: Why do they need/ want to change their vehicle(s)?
- What is influencing that decision? That timescale?
 - PROBE: What has impacted the decision?
 - Covid-19? Vehicle availability? Recession? Economy? Electric infrastructure / vehicles? Energy crisis? Cost of living crisis?
 - PROBE: Why?
 - PROBE: What is their usual plan / timescale for changing vehicle(s)?
- When they next change their vehicle(s), what are they looking at?
 - PROBE: Why do they say that?
 - PROBE: Type of vehicle?
 - PROBE: Due to Emissions standards?
 - PROBE: Have they experienced any issues with vehicle availability?
 - PROBE: For new vehicles?
 - PROBE: For used vehicles?
 - Why do they say that?
- If no issue with availability, then probe as to whether they think it is in an issue? Have they heard anything from other drivers?
- Have you experienced/experienced issues with vehicle affordability?
 - PROBE: For new vehicles?
 - PROBE: For used vehicles?
 - Why do you say this? What additional information can they give about this situation?

15 mins

Awareness

- Are they aware of the Clean Air Plan In Greater Manchester?
 - If yes, what is it? Moderator to note if they are describing the old proposals or new proposals or a mix of the two
 - What do they think is happening now? Any awareness of new plans being drawn up?
 - If no, then moderator to provide more information?

MODERTOR READ OUT/SHOW INFORMATION FROM CURRENT INFORMATION SHEET PROVIDED BY TfGM

- Explain about the plan and that its being developed in consultation

- What do they think of the proposal?
- PROBE: Positives? Negatives? Their stance on it?
 - For outside GM – how will it affect them compared to businesses within GM?
- What impact do they think the CAP will have on them?
 - Their business?
 - Their customers/clients?
 - On those with affected vehicles?
 - On businesses outside of GM who trade within GM?

Probe – to what extent will they be impacted?

COMPLIANCE IS BASED ON THE FOLLOWING:

- Vehicle type and its emission standards
- Fuel type (e.g. diesel or petrol)

Minimum emission standards

Each vehicle type has a minimum emission standard. You can find your vehicle’s emission standard in your vehicle log book or from your vehicle manufacturer.

To avoid being charged in a clean air zone, your vehicle must meet the following minimum standard:

Vehicle type	Clean air zone minimum standard
Buses, coaches, heavy goods vehicles	Euro VI
Vans, minibuses, taxis, private hire vehicles, cars	Euro 6 (diesel) and Euro 4 (petrol)
Motorcycles	Euro 3

10 mins

Funding

- Were they aware of the Clean Commercial Vehicle Fund for HGVs, as agreed in 2021?
 - If yes, how? What do they think of it?
 - If no, then moderator to explain

MODERATOR TO SHOW

2021 Clean Commercial Vehicle Fund (HGV)

Measure	Policy
Replacement grant	<7.5t - £5k <18t - £7k <26t - £9k <32t - £12k <44t - £6.5k
Retrofit grant	Up to £16k
Vehicle Finance	Total contribution capped at up to £12k (dependent on vehicle size)
Eligibility & Vehicle cap	GM, 5 vehicles

- **This is live.** So would like to know about the experience of those that have applied for funding too. E.g., How has it gone? What did they receive? Have their upgraded/replaced? Any issues? What would they keep/change?
-
- What do they think about this fund?
 - PROBE: Thoughts on amounts? Criteria? Eligibility?
- Would they use this fund?
 - If yes, why?
 - If no, why not?
- What type of vehicle(s) would they upgrade to?
 - PROBE: Does the funding inform that decision? Will they upgrade to that vehicle regardless?
 - PROBE: What detail on the funding is important to them to know?
- How would they adapt this fund now to suit the current proposal of a non-charging zone?
- What needs to be included in the funding to help encourage businesses to upgrade?

MODERATOR READ OUT: •Funding needs to be targeted to ensure highest possible levels of compliance. There are a number of ways GM could do this, e.g. targeting funding at the vehicles that travel most frequently past the areas of poorest air quality or targeting funds at those more likely to take up the offer to upgrade to a compliant vehicle.

- What do they think is the best way of targeting the funding?
- Why is that?
- What is going to encourage people to change their vehicle(s)?
- Will they change their vehicle(s)?

15 mins

Cameras

- Are they aware of how the proposed non charging zone will work? (How GMCA will monitor compliant / non-complaint vehicles)?
 - If yes, how?
 - If no, then can they guess?

MODERATOR TO READ OUT/SHOW

- *Use of ANPR cameras to identify non-compliant vehicles
- What do they think about using ANPR cameras for this purpose?
 - PROBE: what do they like?
 - PROBE: what do they dislike?
 - PROBE: Data privacy? Number of cameras? Cost?
 - PROBE: why do they say this?
- Will this help encourage people to upgrade?
 - If yes, why?
 - If no, why not?

5 mins

Other measures

- How else can NO2 be reduced in the region? What else can be done to reduce those levels?
- Are there any other measures that could help HGV vehicle owners to upgrade to cleaner vehicles?
- If yes, what measures?
- If no, why is that?

Wrap up

- What is the one point that they have talked about they would like the “clean air team” to take away when developing the new plan?
 - Why do they say this?
- What is the best way to get updates on the GM CAP to them?

5 mins

Clean Air Plan Discussion Guide - Coach

All respondents will:

- own at least 1 non-compliant vehicle

*This topic guide has been designed to provide structure to the interviews – it is **NOT** intended to be used as a script. To help the moderator, prompts have been included (throughout the guide see 'PROBE'); these are suggestions of questions that can be asked if appropriate to probe deeper into the respondents' views.*

Introduction

- Self/ AECOM/independent consultancy and conducting research on behalf of TfGM
- Conducting research on behalf of the Transport for Greater Manchester (TfGM) who are acting on behalf of the 10 Local Authorities
- **Purpose of the research is to explore respondents' views on upgrading vehicles**
- Emphasise there are no right or wrong answers
- Emphasise confidentiality – recording interview for accuracy of reporting. Recording will not be passed on to anyone outside the research team or the client team. Findings are aggregated for reporting. Stress anonymity in reporting of findings.
 - No mobiles
 - How the discussion will work (contributing to discussions, materials being shared);
 - Consent form check

Business Information

- Name
- Where is the business based?
- What is their customer base like?
- What vehicles do they own/ lease? Number of vehicles?
- Current age of vehicles?
- Frequency of use with the vehicle(s)

If outside GM, how often they travel into GM? For what journey purposes?

5 mins

Current vehicle market and vehicle upgrade

- How would they describe the current market conditions in their sector in the last 12 months?
 - PROBE: Is it thriving/okay/struggling?
 - Why do they say that?
- How often do they renew their fleet of vehicles typically?

- When did they last change their vehicle(s)?
 - Why?/ Why not?
- When do they next expect to change their vehicle(s)?
 - PROBE: Why do they need/ want to change their vehicle(s)?
- What is influencing that decision? That timescale?
 - PROBE: What has impacted the decision?
 - Covid-19? Vehicle availability? Recession? Economy? Electric infrastructure / vehicles? Energy crisis? Cost of living crisis?
 - PROBE: Why?
 - PROBE: What is their usual plan / timescale for changing vehicle(s)?
- When they next change their vehicle(s), what are they looking at?
 - PROBE: Why do they say that?
 - PROBE: Type of vehicle? Make? Model?
 - PROBE: Fuel type?
 - PROBE: Due to Emissions standards?
 - PROBE: Have they experienced any issues with buying vehicles to renew their fleet?
 - PROBE: How easy has it been to buy new vehicles? Used vehicles?
 - Why do they say that?
- If no issue with availability, then probe as to whether they think it is in an issue? Have they heard anything from other coach operators?
- Have you noticed or heard about any issues with vehicle affordability?
 - PROBE: For new vehicles?
 - PROBE: For used vehicles?
 - Why do you say this? What additional information can they give about this situation?

15 mins

Awareness

- Are they aware of the proposed Clean Air Plan in Greater Manchester?
 - If yes, what is it? Moderator to note if they are describing the old proposals or new proposals or a mix of the two
 - How did they hear about it?
 - What do they think is happening now? Any awareness of new plans being drawn up?
 - If no, then moderator to provide more information?

MODERATOR READ OUT/SHOW INFORMATION FROM CURRENT INFORMATION SHEET PROVIDED BY TfGM

- Explain about the plan and that its currently being developed
- What do they think of the proposal?

- PROBE: Positives? Negatives? Their stance on it?
 - For outside GM – how will it affect them compared to businesses within GM?
- What impact do they think the CAP will have on them?
 - Their business?
 - Their customers/clients?
 - On those with affected vehicles?
 - On businesses outside of GM who trade within GM?
 - Probe – to what extent will they be impacted?
- Will their next vehicle(s) be compliant?
 - Why? Why not?

COMPLIANCE IS BASED ON THE FOLLOWING:

- Vehicle type and its emission standards
- Fuel type (e.g. diesel or petrol)

Minimum emission standards

Each vehicle type has a minimum emission standard. You can find your vehicle’s emission standard in your vehicle log book or from your vehicle manufacturer.

To avoid being charged in a clean air zone, your vehicle must meet the following minimum standard:

Vehicle type	Clean air zone minimum standard
Buses, coaches, heavy goods vehicles	Euro VI
Vans, minibuses, taxis, private hire vehicles, cars	Euro 6 (diesel) and Euro 4 (petrol)
Motorcycles	Euro 3

- What are their thoughts on funding being provided to retrofit or upgrade vehicles under a non-charging Clean Air Plan?
 - PROBE: How would this affect their timelines for changing their vehicle(s)?
- If funding was provided, would they retrofit or upgrade?
 - PROBE: If not, why not?
 - PROBE: Dependent on the amount of funding available?

10 mins

Funding

- Were they aware of the Clean Commercial Vehicle Fund, as agreed in 2021?
 - If yes, how? What do they think of it?
 - If no, then moderator to explain

MODERATOR TO SHOW

2021 Clean Commercial Vehicle Fund (Coach)

Measure	Policy
Replacement grant	£32k
Retrofit grant	Up to £16k
Vehicle Finance	Total contribution capped at £32k
Eligibility & Vehicle cap	GM, 5 vehicles

- What do they think about this fund?
 - PROBE: Thoughts on amounts? Criteria? Eligibility?
- Would they use this fund?
 - If yes, why?
 - If no, why not?
- What type of vehicle(s) would they upgrade to?
 - PROBE: Does the funding inform that decision? Will they upgrade to that vehicle regardless?
 - PROBE: What detail on the funding is important to them to know?
- How would they adapt this fund now to suit the current proposal of a non-charging zone?
- What needs to be included in the funding to help encourage businesses to upgrade?

MODERATOR READ OUT: •Funding needs to be targeted to ensure highest possible levels of compliance. There are a number of ways GM could do this, e.g. targeting funding at the vehicles that travel most frequently past the areas of poorest air quality or targeting funds at those more likely to take up the offer to upgrade to a compliant vehicle.

- What do they think is the best way of targeting the funding?
- Why is that?
- What is going to encourage people to change their vehicle(s)?
- Will they change their vehicle(s)?
- How does it affect companies with vehicle(s) inside and outside of GM?
- Does that affect their future planning when considering upgrading to newer vehicle(s)?

15 mins

Cameras

- Are they aware of how the proposal will work? (How GMCA will monitor compliant / non-complaint vehicles)?
 - If yes, how?
 - If no, then can they guess?

MODERATOR TO READ OUT

- *Use of ANPR cameras to identify non-compliant vehicles
- What do they think about using ANPR cameras for this purpose?
 - PROBE: what do they like?
 - PROBE: what do they dislike?
 - PROBE: Data privacy? Number of cameras? Cost?
 - PROBE: why do they say this?
- Will this help encourage people to upgrade?
 - If yes, why?
 - If no, why not?

5 mins

Other measures

- How else can NO₂ be reduced in the region? What else can be done to reduce those levels?
- Are there any other measures that could help coach vehicle owners to upgrade to cleaner vehicles?
- If yes, what measures?
- If no, why is that?




Wrap up

- What is the one point that they have talked about they would like the “clean air team” to take away when developing the new plan?
 - Why do they say this?
- What is the best way to get updates on the GM CAP to them?

5 mins

Appendix D Demographic data tables

Demographic data was collected for taxi drivers and operators who were also sole traders. Similarly, sole traders who responded to the HGV and Coach survey were asked for their demographic data. The sets of data is shown below.

Type of respondent	Tables
Taxi	 Taxi tables Appendix FINAL.xlsx
HGV	 HGV only Appendix FINAL.xls
Coach	 Coach frequencies FINAL.xlsx

Appendix E In-depth interview profiles

The profiles of respondents who were interviewed in the in-depth interviews is shown in the three tables below.

Profile of HGV in-depth interview respondents

Respondent ID	Respondent type	Area Based ID	Operation area	Number of vehicles	Vehicle compliance
10	HGV Business	Lancaster	GM and outside GM	1	Non-compliant
24	HGV Business	Prestwich	GM	4	Non-compliant
62	HGV Business	Stockport	GM and outside GM	12	Compliant: 11 Non-compliant: 1
168	HGV Business	Altrincham	GM	6	Compliant: 5 Non-compliant: 1
287	HGV Business	Stockport	GM	4	Compliant: 3 Non-compliant: 1
481	HGV Business	Warrington	GM	3	Non-compliant: 3
1123	HGV Business	Bolton	GM and outside GM	3	Non-compliant: 30
1125	HGV Business	Stockport	GM and outside GM	11	Compliant: 3 Non-compliant: 4

Profile of Coach in-depth interview respondents

Respondent ID	Respondent type	Area Based ID	Operation area	Number of vehicles	Vehicle compliance
150	Coach operator	Middleton	GM and Outside GM	12	Compliant: 9 Non-compliant: 3
178	Coach operator	Rochdale	GM and Outside GM	4	Compliant: 1 Non-compliant: 3
257	Coach operator	Wigan	GM	8	Non-compliant
322	Coach operator	Cheshire	GM	16	Compliant: 8 Non-compliant: 8
384	Coach operator	Cheshire	GM	11	Compliant: 9 Non-compliant: 2
560	Coach operator	Heywood	GM and Outside GM	9	Compliant: 2 Non-compliant: 7

Table D1 : Profile of Taxi in-depth interview respondents

Respondent ID	Respondent type	Council Based / Licensed	Operation area	Number of vehicles	Vehicle compliance
1	Hackney carriage	Salford	GM	22 (9 owned & 13 leased)	Compliant: 7 Non-compliant: 2
2	Hackney carriage	Manchester	GM	1	Non-compliant
3	PHV driver	Oldham	GM	1	Non-compliant
4	Hackney carriage	Manchester	GM	1	Non-compliant
5	PHV driver	Stockport	GM	1	Non-compliant
6	Hackney carriage	Manchester	GM	1	Non-compliant
7	PHV driver	Stockport	GM	2	Non-compliant
8	PHV driver	Manchester	GM	1	Non-compliant
9	PHV driver	Rochdale	GM	1	Non-compliant
82	PHV operator	Bury	GM and Outside GM	~ 270	Compliant: 10% Non-compliant: 90%
87	PHV operator	Rochdale	GM	~50	Compliant: 50% Non-compliant: 50%
105	Hackney carriage	Manchester	GM and Outside GM	2	Compliant: 1 Non-compliant: 1
122	Hackney carriage	Manchester	GM	1	Non-compliant
128	PHV operator	Bury Manchester Trafford Sefton Wolverhampton Uttlesford	GM and Outside GM	350	Compliant: 250 Non-compliant: 100
143	PHV operator	Manchester Trafford Rossendale Wolverhampton	GM and Outside GM	~400	All with Manchester City Council are compliant
176	PHV driver	Rochdale	GM	~7	Non-compliant: ~6

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