

Taxi age limit changes

TO:	MIKE BROWN MVO, COMMISSIONER, TRANSPORT FOR LONDON
FROM:	CHRISTINA CALDERATO, HEAD OF TRANSPORT STRATEGY AND PLANNING, CITY PLANNING
SUBJECT:	IMPLEMENTATION OF TAXI AGE LIMIT REDUCTIONS AND REMOVAL OF AGE LIMIT EXEMPTIONS
DATE:	5 JULY 2019
PURPOSE:	TO SUMMARISE AND RECOMMEND PROPOSALS TO TAKE FORWARD FOLLOWING THE CONSULTATION ON OPTIONS TO REDUCE THE AGE LIMIT OF TAXIS AND REMOVE EXEMPTIONS TO AGE LIMIT EXTENSIONS

Executive Summary:


- This Decision Paper is to inform you of the outcome of the consultation on reducing emissions from taxis by reducing taxi age limits and exemptions, and provide recommendations for your final decision. It is to be read in conjunction with:
 - The Integrated Impact Assessment and supporting information document (published as part of the consultation in February)
 - Consultation Report (summary of consultation responses and TfL responses to issues raised)
- The recommendation is to proceed with the introduction of the proposals which were publicly consulted on earlier this year. These are:
 - mandating the maximum operating age;
 - a phased age limit reduction to 12 years by 2022 for Euro 3, 4 and 5 taxis; and
 - removal of exemptions for historic and classic/niche vehicles, alternative fuels and hardship.
- This is a decision which relates to a change to the taxi 'Conditions of Fitness' which determine how taxis are permitted to be licensed to operate in London. Changes to the 'Conditions of Fitness' can be authorised by the TfL Commissioner under TfL Standing Order 122.
- The recommendations made in this paper have been shared with the Deputy Mayors for Transport and Environment and the Mayor for information. However, the decision to approve the consultation proposals and to amend the Conditions of Fitness is a TfL decision.

Recommendations

The Commissioner:

- I. **CONFIRMS** the following consultation proposals for implementation, having regard to the matters set out in this document, its Appendices, the Consultation Report and the IIA:
- a) The mandating of the maximum operating age of vehicles for the purpose of the licencing of vehicles as taxis from 1 November 2019 (as described in paragraphs 2.1 and 2.2 below);
 - b) Subject to (c) below, the phased reduction in taxi vehicle maximum age limit for Euro 3, 4 and 5 diesel taxis, from 15 years in 2019 to 12 years in 2022, also effective from 1 November of those years;
 - c) The retention of the 15 year age limit for:
 - diesel taxis which meet the Euro 6 standard for emissions;
 - taxis which have been converted to run on Liquid Petroleum Gas (LPG) after 31 October 2019 and which meet the Euro 6 standard for emissions; and
 - taxis which meet existing zero emission capable (ZEC) taxi requirements (as defined).
 - d) The removal of the age limit exemptions, which currently exist for alternative fuel conversions, historic and classic/niche vehicles and for hardship/personal circumstances, noting that TfL retains the ability to consider individual applications and to grant exemptions to the age limit in exceptional circumstances where we consider it justified to do so.
- II. **APPROVES** the changes to the taxi Conditions of Fitness set out in Appendix I (extract of relevant text);
- III. **NOTES** that TfL's taxi vehicle inspection manual will be updated to reflect these changes and a TPH notice will be issued to notify the taxi trade explaining the above changes;
- IV. **NOTES** the position regarding the LTDA's alternative proposal for the conversion of Euro 5 vehicles to Euro 6 set out in the report.

Note: the Commissioner is requested to sign and date this document as follows

<p>Mike Brown MVO, Commissioner The above request has my approval.</p>	
<p>Signature: </p>	<p>Date: 05-07-19</p>

Decision required – supporting report, containing the following sections:

1. Introduction and background
2. Summary of the proposals
3. Additional incentives for taxi drivers to switch to cleaner vehicles
4. Consultation process and summary of responses
5. Impacts of the proposals
6. Other considerations
7. Recommendations
8. Milestones and next steps

1. Introduction and background

Taxi age limit consultation

- 1.1 Taxis contribute 25 per cent of NO_x road transport emissions in central London. From 2019 taxis will be the largest source of road transport NO_x in central London. Indeed, given improvements across the rest of the vehicle fleet in London, we estimate the true contribution of taxis to NO_x in central London is around 30 per cent¹.
- 1.2 The EU Air Quality Directive sets binding legal limits (called 'limit values') for concentrations of pollutants in outdoor air. These legal limits will remain in force regardless of the UK leaving the EU, unless specifically repealed. London is currently in breach of the limit values for nitrogen dioxide (NO₂). These breaches cause serious harm to human health.
- 1.3 The Air Quality Directive requires the government to produce an Air Quality Plan to end the ongoing breaches. The relevant plan is the government's 'Air Quality Plan for nitrogen dioxide (NO₂) in UK (2017)'. The Plan requires urgent steps including ULEZ to be taken to reduce NO₂ levels in London, with full compliance expected by 2025 or earlier. As explained below, the Plan assumes a large decrease in taxi emissions alongside action to reduce emissions from other vehicles. Meeting that reduction is necessary for the Air Quality Plan to succeed. The Mayor's Transport and London Environment Strategies (below) contain policies and proposals aimed at delivering the Plan.
- 1.4 To address taxi emissions, in 2015, TfL consulted on reducing the taxi age limit to 10 years, 12 years or remaining at 15 years with a range of incentives to drive uptake of zero emission

¹ The London Atmospheric Emissions Inventory (LAEI) in 2013 indicated that taxis contributed 16 per cent of central London road transport emissions. The 2016 LAEI indicated that taxi emissions in 2016 were 20 per cent of central London road transport emissions. The estimate for 2019 taxi emissions assumed in consultation materials was based on the most recent LAEI data available at the time (2013), January 2019 Taxi License data and baseline 2019 emissions projections. This estimated that taxi emissions in 2019 (i.e. currently) account for 25 per cent of central London road transport emissions. In 2020, we estimate that taxi emissions will be at least 30 per cent of central London road transport emissions. This is the case under any future scenario tested (30 per cent under the consultation age limit proposals, and higher under scenarios which do not include reducing taxi age limits).

capable (ZEC) taxis. Following the consultation, it was decided to retain the 15 year age limit. Instead of changes to the taxi age limit, a target of 9,000 ZEC taxis in service by the end of 2020 was set. If achieved, this would have led to a reduction of around 45 per cent in taxi NOx emissions from 2013 levels². However, it was stated in the 'Ultra Low Emission Zone Further Licensing Proposals for Taxi and Private Hire Vehicles Consultation Report' (2015) that the policy would be revisited if the targets set were not on track to be achieved by 2020.

- 1.5 By 2019, it was apparent that the 9,000 figure was not on track to be realised. This was due to a number of factors including ZEC taxi manufacturing delays and only one manufacturer bringing a ZEC vehicle to market by 1 January 2018, the date the new licensing rules came into effect. Uptake of the original delicensing scheme was also very low as taxi vehicle owners did not feel the payment amounts provided adequate compensation for removing their vehicles from the fleet.
- 1.6 As of 19 June 2019, the size of the overall taxi fleet has fallen from 22,000 in 2015, to just over 19,000 with over 1,800 of these taxis licensed as zero emission capable, making them over nine per cent of the overall fleet.
- 1.7 The 45 per cent emissions' saving is assumed and modelled in the Government's 2017 Air Quality Plan (see paragraph 1.3 above). That Plan has been submitted to the European Commission in response to the UK not meeting EU legal limits for these emissions. Reducing taxi emissions is an important contribution to achieving compliance with the limit values in London by 2025 or earlier (which assumes a 65 per cent reduction in NOx emissions from taxis).
- 1.8 While take-up of new ZEC taxis is increasing, the rate of growth, alongside the removal of the older polluting taxis, is not progressing within the timescales required. Further action to reduce taxi emissions is required if the Air Quality Plan is to be successful.
- 1.9 Where there is a choice of action, the law requires implementation of those measures that reduce exposure and bring about compliance as soon as possible, with the greatest certainty of result. When deciding what measures to take however, it is reasonable to consider proportionality, degree of certainty and impact on third parties.
- 1.10 After considering (and modelling the air quality impacts of) a range of options, it was considered that a phased reduction of the taxi age limit to 12 years by 2022 would be needed to deliver the reduction in taxi emissions required to achieve compliance by 2025. This proposal was put out to public consultation earlier this year. The 10 week consultation was supported by an Integrated Impact Assessment, summarised below and included here as Appendix D.

2. Summary of the proposals

Mandate the maximum taxi operating age from 1 November 2019

- 2.1 Currently, taxis are allowed to be relicensed for 12 months up until the day before the taxi reaches 15 years old. TfL does not have discretion to issue taxi licences for less than a full year. As a result, any licence issued is for a full 12 month period. In practice, this means that taxis can operate for almost a year beyond the intended maximum age limit. For example, a

² Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

vehicle relicensed the day before its 15 year age limit is currently able to operate until it is almost 16 years old. The taxi trade is well aware of this quirk of the licensing arrangements and utilise it.

- 2.2 In the consultation we proposed, from 1 November 2019, to make the maximum operating age the same as the relevant age limit³ for all licensed taxis. This would ensure that no taxi is licenced to operate over its relevant maximum age limit (e.g. into its 16th year under the current 15 year age limit). This would mean vehicle owners would be responsible for ensuring their taxi is re-licensed just before the vehicle is 14 years old in order to continue operating it up until it reaches a maximum age of 15 years⁴. This rule will apply to the reduced age limits described below.

Introduce a new age limit for Euro 3, 4 and 5 taxis over a phased period of time from 1 November 2020

- 2.3 In the consultation we proposed that the maximum taxi age limit be reduced to 12 years by 2022 for Euro 3, 4 and 5 diesel taxis. The proposals set out a plan to reduce the age limit in phases, to give taxi owners/operators time to plan ahead, reducing the maximum age limit by one year, from 1 November each year, until 2022.

Date effective	Maximum age limit for Euro 3, 4 and 5 diesel taxis
From 1 November 2019	15 years
From 1 November 2020	14 years
From 1 November 2021	13 years
From 1 November 2022	12 years

- 2.4 It was also proposed that the maximum age limit for Euro 6 diesel taxis and ZEC taxis, as well as those newly converted to LPG, would remain at 15 years.

Remove taxi age limit exemptions from 1 November 2019

- 2.5 We also proposed to remove the age limit exemptions for alternative fuel conversions⁵, historic and classic/niche vehicles and for hardship/personal circumstances. If implemented, all applications for an exemption to the relevant maximum age limit would be assessed on a case by case basis with consideration given to the individual circumstances of the case, air quality and the legal commitment to reduce NOx and other harmful emissions as quickly as

³ This is calculated from the date of the vehicle's first registration under the Vehicle and Excise Registration Act 1984.

⁴ The consultation document pointed out that (if this change was approved) owners of taxis that will be 14 years (i.e. in their 15th year) on 1 November 2019 have the option before 31 October 2019 to either (a) apply for a de-licensing payment of £1,000 or (b) surrender and relicense their vehicle for a full 12 months, at a cost of £110 (£66 for the application and £44 for the grant of the licence, thus allowing it to operate into its 15th year.

⁵ Taxi owners who have already converted their vehicle to LPG at their own expense will retain their current exemption and will not be affected by this proposal.

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we reasonably can. To be clear, this would be a removal only of these three pre-set ‘category’ exemptions. We would retain the ability to consider individual cases of hardship and grant exemptions in exceptional circumstances where we consider it justified to do so.

Summary of main impacts identified in the Integrated Impact Assessment (IIA)

Environment

2.6 The consultation materials estimated that the total reduction in taxi NOx emissions would be 27 per cent by 2020 and 70 per cent by 2025. We have now been able to update these figures with the latest taxi fleet information and the impact of the taxi delicensing scheme which is active and affecting vehicle churn. This demonstrates that the total package, including delicensing, LPG retrofit and age limit proposals will result in a reduction in taxi NOx emissions of 38 per cent by 2020. Fifteen percent of these savings (equivalent to four per cent reduction) is delivered by the phased age limit. The phased age limit continues to deliver further emission reductions beyond 2020 which means the 2025 target of a 65 per cent reduction in taxi NOx emissions is achieved, as shown in Figure 1 below.

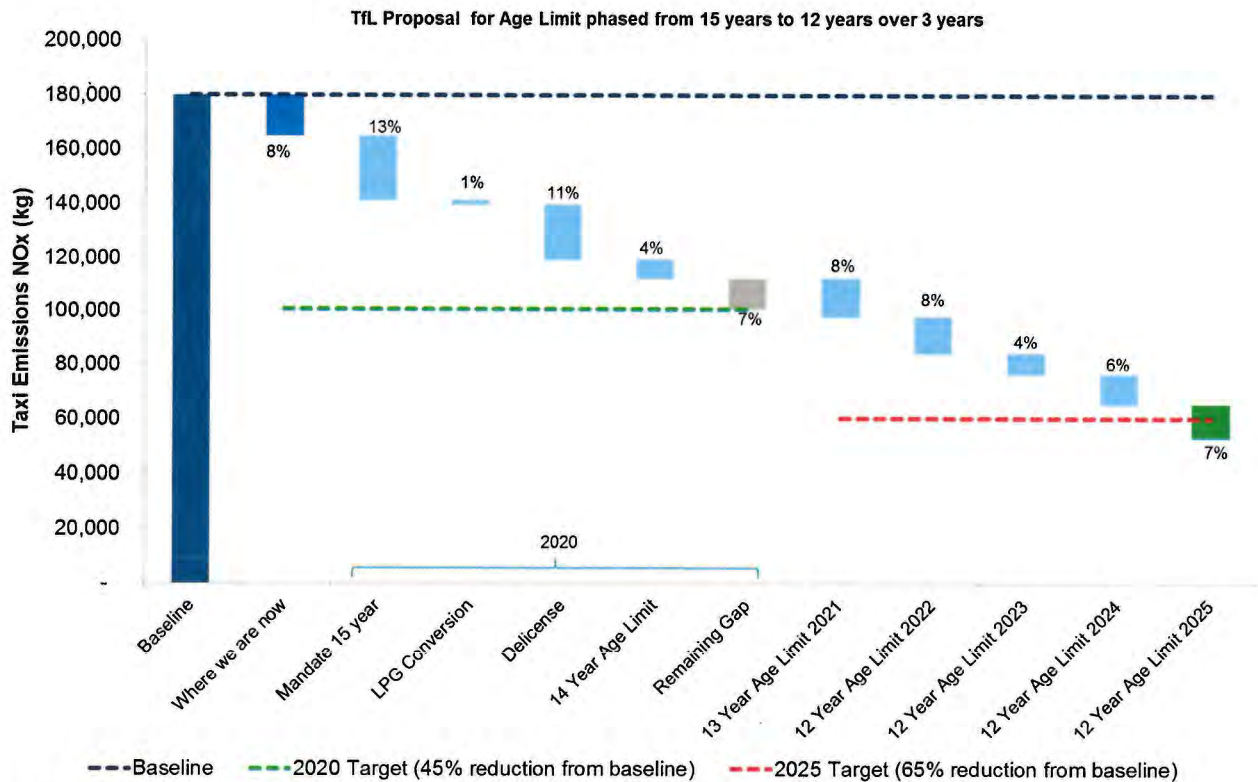


Figure 1: Reduction in NOx emissions as a result of the age limit reduction (as at 17 June 2019)

Health and equality

2.7 TfL is subject to the “public sector equality duty” contained in s 149 of the Equality Act 2010. This duty requires it to have due regard to three outcomes when exercising its functions: (1) the need to eliminate unlawful discrimination, harassment and victimisation; (2)

to advance equality of opportunity between those who share a protected characteristic⁶ and those who do not; and (3) to foster good relations between such people. The IIA was prepared for the purpose of helping to identify the likely potential impacts of the proposals on these and other groups and interests, and formed part of the consultation materials. A copy is at Appendix D.

2.8 The proposals will result in older taxis leaving the fleet earlier than previously planned. If these older vehicles are not replaced by younger vehicles then the overall size of the fleet will reduce, as has already been seen to some extent through the requirement for all newly licensed taxis to be ZEC, and the uptake of the taxi delicensing scheme. This would result in improved air quality but may also reduce the availability of taxis in London. As a result the IIA identified the following potential negative impacts which are relevant to the public sector equality duty:

- Accessibility – a reduced fleet size may reduce availability of taxis which will impact taxi users, particularly wheelchair users which who have a higher level of reliance on taxis (which are wheelchair accessible), however the number of licensed taxis does not necessarily equate to the number of available taxis at a given time because the mileage for each taxi varies, and older taxis have lower mileage. We will, however, monitor this.
- Safety and crime - if the proposals result in a reduction in the size of the taxi fleet then there may be a minor negative impact on safety and crime, particularly on female passengers and trans passengers travelling at night if the supply of available taxis decreases, or wait times increase.
- Access to healthcare and social infrastructure - If the proposals result in a reduction in the size of the taxi fleet then there might be a minor negative impact on access to healthcare and social infrastructure. TfL does not hold any data on the proportion of people who access healthcare and social infrastructure by taxi.
- The IIA included a review of impacts on groups with protected characteristics. It found that 25 per cent of taxi drivers are 60 or above and therefore older drivers could be disproportionately affected by the proposals.
- Stress and anxiety - If drivers have to work longer hours to maintain a sufficient income then their stress or mental health may suffer, there is evidence that increased working hours can lead to mental ill-health or stress⁷.

(Paragraph 4.16 below discusses a number of issues identified in the IIA that were also raised in consultation responses that are relevant to the public sector equality duty.)

Economy

2.9 Owners of Euro 3, 4 and 5 taxis will all be affected, to differing extents, by the proposals to mandate the maximum operating age or the phased age limit proposals. This accounts for

⁶ These are age, disability, gender re-assignment, pregnancy and maternity, race, religion or belief, sex, and sexual orientation, and in certain circumstances marriage and civil partnership.

⁷ Health and Safety Laboratory (2003) 'Working long Hours'. (http://www.hse.gov.uk/research/hsl_pdf/2003/hsl03-02.pdf)

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approximately 16,000 vehicles (at some point in their lifetime) based on the fleet profile in January 2019. Owners who are impacted have the options to apply for a delicensing payment, sell their vehicle, rent another vehicle, buy a younger vehicle, convert a Euro 5 vehicle to Liquid Petroleum Gas (LPG) or retire from the trade. The drivers who are likely to be most severely affected are those who do low annual mileage or work fewer hours and may therefore not be able to rent or buy a newer vehicle; although drivers of Euro 5 vehicles will also be able to apply for part funding for an LPG conversion to extend the life of their existing vehicle, allowing it to operate for 15 years.

- 2.10 The cost of vehicle rental potentially posing a barrier for some, especially older, drivers was identified in the IIA. In meetings following the end of the consultation and in communications with TPH, taxi trade representatives have reinforced their concerns about the rental costs and availability of vehicles, which they say is becoming more acute with the result that there are drivers unable to find vehicles and so unable to work. The availability of vehicles was also raised by the RMT Union during consultation. It is not possible to verify this claim or its extent with certainty, although we will monitor the situation and keep it under review. However, at this stage, a reduction in the number of vehicles does not appear to be a direct result of any proposed changes to age limit, but rather from a combination of the introduction of the ZEC licensing requirement for new vehicles from 1 January 2018 and the enhanced delicensing scheme, which was expanded to provide for additional vehicles to be delicensed (and thereby removed from the fleet) in response to calls from the trade.
- 2.11 There are a number of mitigating measures in the current proposals. There is provision for 1,000 drivers to part fund a conversion Euro 5 taxis to LPG. Payments of £5,000 are available to put towards the total conversion cost (approximately £10,000). A LPG vehicle will continue to qualify for a 15 year age limit. Furthermore, delicensing payments may help some drivers with the cost of vehicle rental or purchase. It is estimated that the two current suppliers of the LPG systems could convert in excess of 500 taxis per annum. It should be noted that Euro 5 taxis will not be affected by the age limit proposals until 2024/5 due to their age profile – the oldest Euro 5 taxis are seven years old and therefore will not be impacted by a 12 year age limit for another five years at minimum.
- 2.12 There is no restriction on the availability of new ZEC vehicles at the timing of writing, with new vehicles available within two weeks of placing an order. A second ZEC taxi model is being developed which, provided TfL's Conditions of Fitness are met, will be available to purchase in the coming months.
- 2.13 The IIA set out options available to drivers affected by age limit proposals in Table 16 in section 7.3, which can be found at the following address:
https://consultations.tfl.gov.uk/tph/taxi-age-limits/user_uploads/reducing-emissions-taxis-integrated-impact-assessment.pdf
- 2.14 TfL's ability to grant exemptions to the age limits in justified circumstances could be used to relieve hardship caused by any unavailability of vehicles.

3. Additional incentives for taxi drivers to switch to cleaner vehicles

All newly registered taxis to be ZEC

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- 3.1. Since 1 January 2018, all taxis presented for licensing for the first time are required to be ZEC. This means having CO₂ emissions of no more than 50g/km and a minimum 30 mile zero emission range.

ZEC grants

- 3.2. The government will pay for up to 20 per cent of the purchase price for purpose-built taxis that have CO₂ emissions of less than 50g/km and can travel at least 112km (70 miles) without any emissions at all. This is to a maximum of £7,500 and applies to the ZEC taxi model currently available.

Enhanced delicensing scheme

- 3.3 At the same time as we announced our intention to consult on the taxi age limit proposals, we announced enhancements to the taxi delicensing scheme to make it more attractive to taxi vehicle owners. The previous scheme was open for approximately 18 months and had paid out less than £500,000 by the time it closed. Feedback from the trade, suggested that the payment levels were too low.
- 3.4 The enhanced scheme included restructured payment levels to provide a smaller number of larger payments – with top payment levels of £10,000 as opposed to the previous top payment of £5,000. At the same time, the overall fund was reduced from £42m to £18m due to TfL budgetary constraints and low levels of take up. The Licensed Taxi Drivers Association (LTDA) and the union Unite met the Mayor in January 2019 to express concern and disappointment over the age limit proposals and the reduction in the budget available for delicensing. In February, the Mayor announced that he was adding a further £24m to the delicensing fund, and the number of top level payments was significantly expanded to 1,250.
- 3.5 The enhanced and expanded delicensing scheme is structured as per Table 1 below:

Eligible vehicles	No. of payments available	Delicensing payment
Taxis younger than 13 years	1,250	£10,000
	1,100	£9,000
	850	£8,000
	500	£7,000
	400	£6,000
13 and 14 year old taxis	1,000	£1,000

Table 1: The current delicensing scheme

- 3.6 More than 3,700 applications have been received since the enhanced scheme re-launched in January. Current levels of uptake are expected to lead to an additional 11 per cent reduction in taxi NO_x emissions by 2020. High levels of uptake of taxi delicensing have inevitably reduced the availability of diesel taxis available to drivers to buy or rent. Expansion of the scheme was requested by taxi trade representatives and delicensing payments should make it easier to replace a diesel vehicle with a ZEC for those who wish to do so.

- 3.7 The £42m fund also includes £5m to support the conversion of a limited number of Euro 5 taxis (1,000) to LPG. There have so far been more than 200 expressions of interest in the proposed LPG conversion scheme. Converting a Euro 5 taxi to LPG reduces NOx emissions from a taxi by over 70 per cent. Newly converted LPG taxis would qualify for a 15 year age limit. This may help mitigate the impact of the proposed limit changes on older drivers who were identified in the IIA as potentially finding it more difficult to rent or buy a new taxi.
- 3.8 It should also be noted that in June 2019 Autogas, a supplier of LPG, informed us that 14 refuelling stations at Shell forecourt sites will not be renewed and will expect to be closed over the next two years. However we are in discussions with another provider who has committed to review any significant gaps these closures will create and develop plans to provide a service to enable continued supply in these areas if needed. At the current time, there are a total of 45 LPG refuelling stations in London.

4. Consultation process and summary of responses

Responses received

- 4.1 The consultation ran for 10 weeks between 15 February and the 26 April 2019. There were 5,125 web responses received, and a further 49 stakeholder responses.

Responses to proposals

- 4.2 There was majority support for the question 'Do you agree that taxis should play their part in reducing harmful NOx emissions in London' (56 per cent of total responses, 52 per cent of responses from the taxi trade or 68 per cent if responses from the taxi trade are separated out). However, there was not majority support for the specific proposals, particularly reducing the age limit to 12 years by 2022 which had 24 per cent support (5 per cent of responses from the taxi trade or 51 per cent if taxi driver responses are separated out). An overview of the response by question is included in Appendix A.
- 4.3 A number of issues and suggestions were raised by respondents to the online consultation, including the following:
- it is unfair to change the goalposts (i.e. the age limit)
 - the proposals will result in hardship for drivers
 - there should be higher grants for purchase of zero emission capable taxis
 - PHVs should be banned
 - there is a lack of electric vehicle charge points
 - taxis should not be exempt from the Ultra Low Emission Zone / Congestion Charge
 - reduce taxi idling
 - make more alternative fuel sources available.
- 4.4 Responses to the issues raised are provided in chapter 5 of the Consultation Report at Appendix C.

Stakeholder responses

- 4.5 Of the 49 stakeholder responses, including from London Boroughs, health and environmental groups, the majority were overwhelmingly supportive of the proposals, with some groups calling for them to go further (e.g. either a 10 year age limit or to bring in a 12 year age limit sooner). Stakeholder responses from the taxi trade were not supportive; some of the issues raised and alternative suggestions are set out in the following section. A summary of all the stakeholder responses is included in Appendix B.

Stakeholder responses from the taxi trade

- 4.6 There were 10 Stakeholder responses from the taxi trade. All were opposed to the age limit proposals. The most common issues raised are as follows:

Issue raised	Stakeholder
The proposals are unfair because there is a lack of alternatives	London Motor Cab Proprietors Association
It is unfair to reduce the age limit of vehicles which have been purchased with the expectation that they will be able to operate until 15 years of age	London Motor Cab Proprietors Association
There are not enough electric vehicle charge points	London Motor Cab Proprietors Association
A retrofit solution for Euro 5 vehicles would deliver the emissions savings required and would not force drivers out of business	Licensed Taxi Drivers Association
The proposals will impact re-sale and rental values	Licensed Taxi Drivers Association
More support should be made available for drivers experiencing hardship	Mytaxi
More incentives should be provided to switch to lower emissions vehicles	MyTaxi
The reduced age limit will lead to a shortage of taxis	RMT Union
Zero Emission Capable vehicles should be allowed to operate to 16 years of age	RMT Union
Age limits should not be changed until other options are available	Unite the Union
£45-70 million will be wiped off the value of the fleet	United Cabbies Group
Retrofit options need to be considered	United Cabbies Group

LTDA proposal

- 4.7 The LTDA does not agree with TfL's proposals to reduce taxi NOx emissions through a phased reduction in the maximum taxi age limit for Euro 3, 4 and 5 vehicles to 12 years by 2022.
- 4.8 The LTDA has put forward an alternative proposal, which is set out in their consultation response at Appendix E. In summary this is to:

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- Mandate 15 year expiry (as set out in our consultation proposals)
- Retain a 15 year age limit for all taxis
- Mandate the retrofit of all Euro 5 taxis to Euro 6 standards (TfL funded)

4.9 The LTDA also drew comparisons with the TfL approved Euro VI bus retrofit. The following table sets out the comparative emissions of Euro V and VI buses and Euro 5 and 6 taxis. As can be seen below, a TfL Euro VI bus performs far better than the average Euro 6 taxi, despite the fact that a bus is larger and has greater passenger capacity. Indeed, it is the poor performance of the taxi fleet that explains why it is important to achieve prompt improvements in emissions to meet the NOx limit values. LTDA have expressed their view that a Euro 6 converted taxi may ultimately perform better than the COPERT figures, but there is as yet no evidence of this from real-world emissions testing. COPERT figures are based on the real-world performance of the current Euro 6 taxi fleet, and are a standard used across local and national government for emissions modelling:

	Double Deck Bus	Taxi
Euro V/5 NOx g/km	8.44	1.31
Euro VI/6 NOx g/km	0.48	1.06

Table 2- COPERT 5 Emissions Factors (NOx g/km) for bus/taxi travelling at 20kph

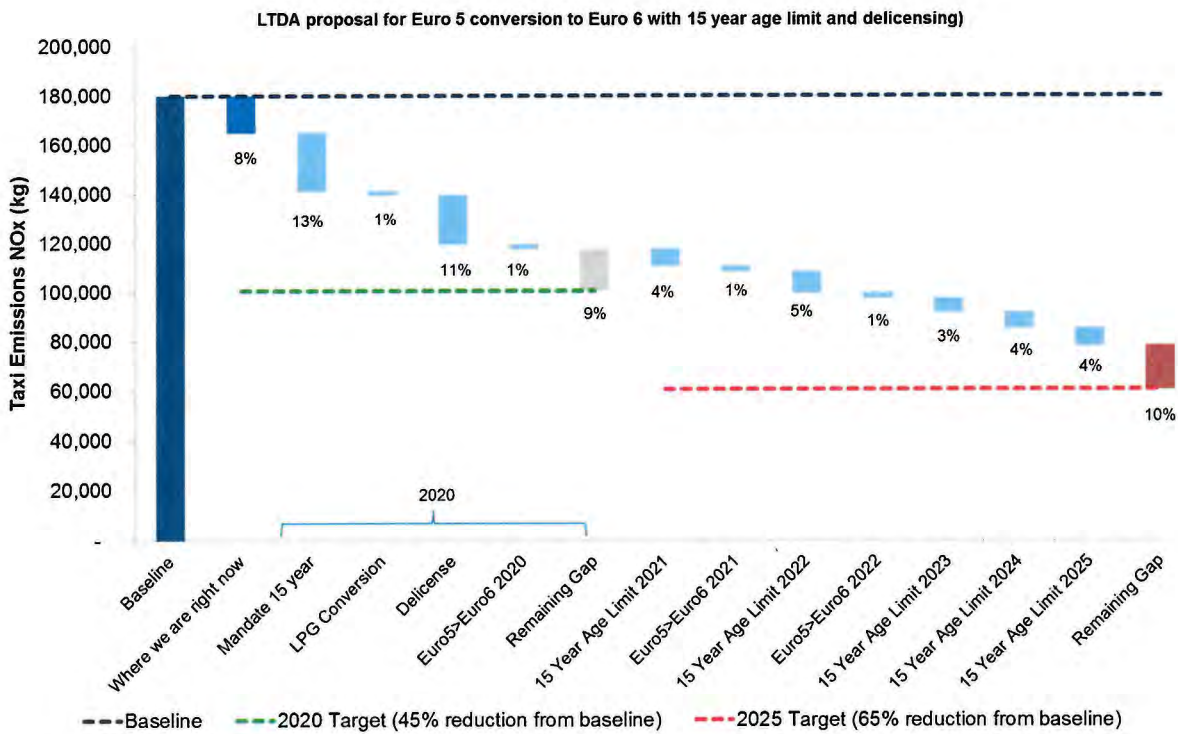
Analysis of LTDA proposal

- 4.10 The proposals have been considered by TfL, particularly as regards retrofit and air quality issues, and our technical response is summarised below.
- 4.11 In air quality terms, Figures 2 and 3 show how the options perform against our proposals:

Figure 2: Estimated NOx emissions from taxis based on the LTDA's proposal for mandatory Euro 5 to Euro 6 conversion

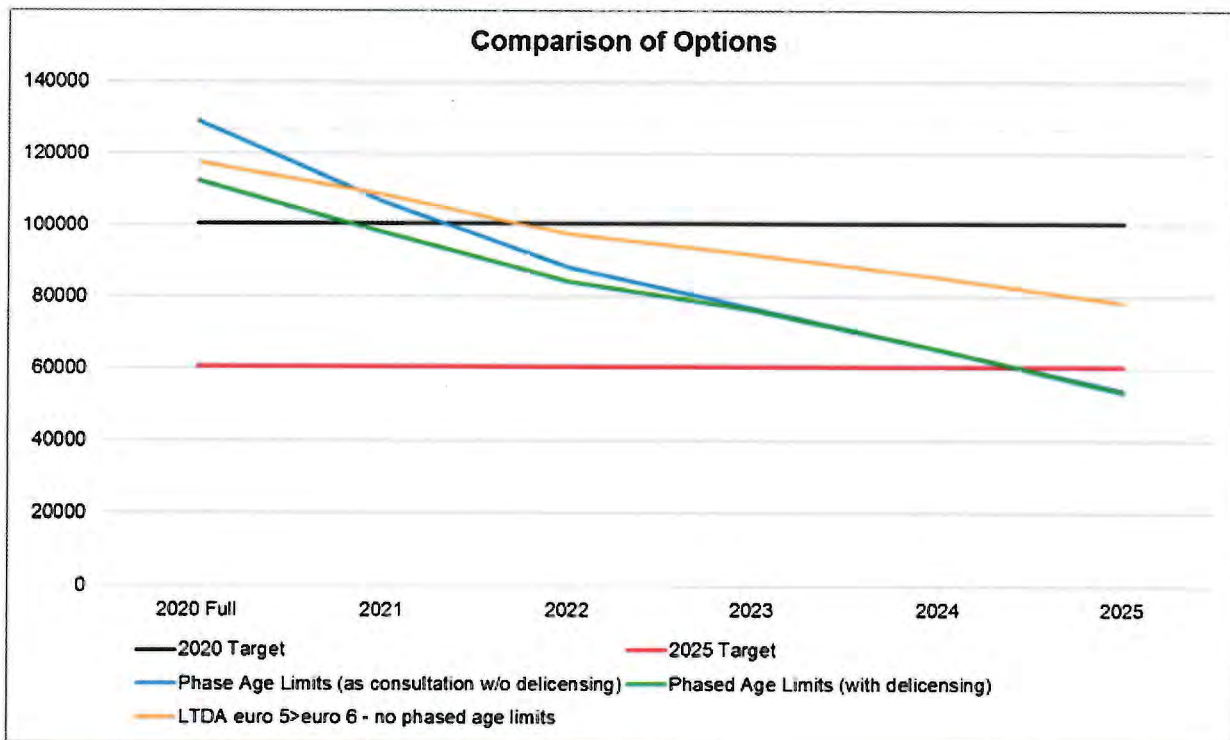
Figure 2

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4.12 It should be noted that Figure 2 demonstrates the maximum impact that a Euro 5 to 6 conversion could have if delivered alongside the expected gains from delicensing (which in itself delivers an 11 per cent reduction). However, this overestimates the NOx savings the LTDA scheme could deliver, as their proposal includes repurposing funding currently allocated to delicensing to pay for vehicle conversions. The emissions savings from the delicensing scheme would therefore not be realised to the extent shown here and the 10 per cent gap in 2025 would in fact be greater.

Figure 3: How the options compare against each other



Response to LTDA proposal

- 4.13 At this stage, it does not appear that the LTDA's proposal presents a feasible alternative for reducing taxi NOx emissions by 65 per cent by 2025 for the following reasons:
- Air quality modelling indicates that we would not meet the 2025 target under these proposals. That is because Euro 6 conversion for Euro 5 taxis would not deliver the same level of air quality benefits as the age limit proposals. On a like for like comparison, the LTDA proposals deliver less benefits, with less certainty and miss the 2025 target.
 - There is no approved Euro 5 to Euro 6 taxi retrofit currently available. Therefore, there is no certainty that the scheme could be delivered as proposed. It is expected that it would be approximately 12 months before a retrofit solution is approved, nationally accredited and conversion centres up and running and ready to convert vehicles at scale. It is therefore not feasible to consider this to be an implementable alternative given the urgent need for action.
 - There is no funding for a TfL funded retrofit programme and it is estimated it would cost up to £18m to convert all Euro 5 vehicles; indeed if funds were diverted from the delicensing to a retrofit fund the assumed savings from delicensing would not be achieved.

An analysis of the LTDA's proposals set out in their consultation response is included at Appendix F. Correspondence between the LTDA and the Mayor is included at Appendices G and H

- 4.14 We met with the LTDA to talk through the results of the air quality modelling. They are hopeful that a retrofit solution could reduce taxi emissions to levels lower than current Euro 6 taxis, but this is yet to be tested. We have recently received updated calculations from

them based on estimates for the performance of the retrofit. These are included at Appendix J and show that if a Euro 5 to Euro 6 conversion could deliver 0.5 gm/ km reduction of NOx the reductions required by 2025 by the Air Quality Plan would be met. However, no approved Euro 5 to Euro 6 taxi retrofit is currently available.

- 4.15 We welcome suggestions from all stakeholders including the taxi trade to find other ways to reduce taxi emissions, and if a Euro 6 retrofit is developed, tested and approved in future, matters will be kept under review and consideration given to ways to incorporate retrofitted Euro 5 taxis in the new Conditions of Fitness and age limits. We do not propose to take a decision on how newly converted Euro 6 taxis would be considered within these consultation proposals at this stage, given that there are no approved after-market retrofit exhaust abatement systems. There is also considerable uncertainty as to the real-world performance of such a system as applied to a Euro 5 taxi driving on London's roads. We await the outcome of legislative vehicle emissions testing and real-world operational performance tests to enable us to consider this issue at a later date, in full possession of the relevant data.

Impacts raised in consultation responses

- 4.16 A number of issues identified in the IIA, relevant to TfL's public sector equality duties mentioned at paragraph 2.7 above, were also brought up in responses to the consultation:
- Impact on older drivers – a number of responses highlighted the fact that drivers may be forced to retire early or rent a vehicle as a result of their taxi being affected by the reduced age limit
 - Disabled passengers suffer due to a reduction in the size of the fleet – all licensed taxis are fitted with a wheelchair ramp and some disabled passengers may be negatively affected if the size of the taxi fleet reduces
 - The IIA also identified that if drivers have to work longer hours to maintain a sufficient income then their stress or mental health may suffer, there is evidence that increased working hours can lead to mental ill health or stress⁸. A number of respondents suggested that this might be the case.
 - The IIA identified the potential for taxi drivers and owners to experience hardship as a result of these proposals. This is as a result of the reductions in age limit. A number of respondents to the consultation also raised this issue, commenting that it was unfair to change the age limit because it impacted the business model for drivers who had expected to be able to make money from operating their taxi up to 15 years of age. A number of respondents also suggested that the proposals would cause a reduction in the number of available taxis to rent and also that rental costs would increase.
- 4.17 In relation to driver's mental health and well being, we are committed to supporting the trade to ensure that drivers can access appropriate mental health assistance and support. We are currently developing on line resources for drivers and engaging with a range of organisations with specialist knowledge in mental health and wellbeing. Awareness of mental health issues is being raised through a continuing series of wellbeing articles in our 'On Route' magazine and the weekly email sent to licensees. We are planning to hold a

⁸ Health and Safety Laboratory (2003) 'Working long Hours'. (http://www.hse.gov.uk/research/hsl_pdf/2003/hsl03-02.pdf)

seminar alongside senior industry representatives to explore and promote existing support for drivers.

- 4.18 It is not proposed to change the proposals as a result of the impacts identified from the consultation. The revised delicensing scheme, grants for purchase of new ZEC taxis and the LPG conversion scheme all help to provide options for drivers who are impacted by the age limit proposals. As mentioned above we also retain the general discretion to grant exemptions to the age limits in circumstances where we consider it justified to do so.

5. Other considerations

Links to Mayoral Strategies and priorities

Mayor's Transport Strategy

- 5.1 The Mayor's Transport Strategy (MTS) was published in March 2018 and contains proposal 30, which focuses on the transition to Zero Emission Capable taxis:

The Mayor, through TfL, will work with stakeholders to produce and implement a comprehensive plan to encourage and accelerate the transition from diesel-powered taxis to Zero Emission Capable vehicles by providing financial incentives, the necessary infrastructure and regulation (including maintaining a taxi age limit, currently set at 15 years) with the objective of achieving a minimum of 9,000 such vehicles in the fleet by 2020.

London Environment Strategy

- 5.2 In May 2018 the Mayor published a new London Environment Strategy (LES), following a public consultation. The LES complements the MTS and sets out his aspiration to achieve a zero carbon Capital by 2050, including the need to implement a Healthy Streets approach and move to more sustainable transport including ultra low and zero emission vehicles. The LES contains the following proposal:

Proposal 4.2.1.c The Mayor, through TfL, will reduce emissions in the taxi and private hire fleet by phasing out fossil fuels, prioritising action on diesel, and switching to zero emission technologies.

6. Financial and legal comments

- 6.1. TfL is under a duty to exercise its functions having regard to the LES and for the purpose of securing or facilitating the implementation of the MTS. TfL licences motor vehicles as taxis under section 6 of the Metropolitan Carriage Act 1869. Licences may only be issued for a 12 month period. Under Article 7 of the London Cab Order 1934 a vehicle licence may be refused if a vehicle does not conform to "conditions of fitness" laid down by TfL from time to time. The maximum age limit of a vehicle is included as a licensing requirement under TfL's current Conditions of Fitness. The age limit proposals can be implemented by changes to the current Conditions which state that they may be amended to meet air

quality requirements and mention that they were specifically changed for that purpose in 2010 to introduce age limits for taxis.⁹

- 6.2. Appendix I is an extract of the relevant Conditions of Fitness text and shows the proposed changes. Removal of the age limit exemptions can be implemented by updating the taxi vehicle inspection manual and notifying the taxi trade through publishing a TPH notice. The Conditions state that TfL may grant exemptions to its requirements if TfL considers it reasonable to do so in exceptional circumstances.
- 6.3. The approval of changes to the Conditions of Fitness is within powers delegated under Standing Order 131A (b) to TfL's General Counsel. However, under Standing Order 122 the Commissioner may exercise functions of TfL which are delegated to Officers under Standing Orders. It is considered appropriate that the Commissioner takes the decisions requested at Recommendations I to IV above.

7. Recommendations

- 7.1. Having considered a number of different options, including the LTDA alternative proposal, our analysis has demonstrated that reducing the age limits for taxis is the most effective way of reducing NOx emissions to help ensure we achieve compliance in London by 2025 or earlier (which requires a 65 per cent reduction in NOx emissions from taxis) alongside wider measures affecting all vehicles types such as ULEZ).
- 7.2. It is therefore recommended that the proposals set out in the public consultation (as set out in the Recommendations on page two) are implemented with no changes.
- 7.3. This includes the removal of the hardship/personal circumstances exemption currently in place, though it is important to note, as stated above, that we will still retain the general discretion to grant exemptions in circumstances where we consider it reasonable to do so.
- 7.4. We await the full results of the Euro 5 to Euro 6 conversion as proposed by the LTDA before considering how converted Euro 6 vehicles should be incorporated into these proposals. No recommendation is made on how this class of vehicle should be considered at this point. It is likely that the real-world performance of such a conversion, and the effect of conversions on the achievement of the NO₂ limit values, will be significant factors.

8. Milestones and next steps

⁹ The Conditions of Fitness (CoF) published to have effect from 1 January 2007 state at paragraph vi: "LTPH intends as far as possible to maintain a stable platform for vehicle manufacturers and will not therefore expect to review the CoF fully for about 10 years. However, LTPH reserves the right to amend the CoF should there be situations which require it, such as amendments to national or international laws with respect to road vehicles or air quality. These may include, for example, changes arising from disability legislation or the implementation of European emissions and air quality laws. The publication of the Mayor's Air Quality Strategy in December 2010 to accommodate European emissions and air quality laws has resulted in the introduction into the CoF of age based limits for taxis (see below)."

- 8.1. If the recommendations in this paper are taken forward, the decision would be formally communicated via:
- A Taxi and Private Hire notice published on TfL's website
 - A press release, which will also communicate the remaining delicensing payments available
- 8.2 If approved, the decision would come into effect on 1 November 2019 when the maximum operating age would be mandated, with the phased reduction in age limits being introduced from 1 November every year after that until reaching 12 years in 2022.
- 8.3 Letters will be sent to owners of 14 year old taxis explaining that those who wish to relicense their vehicles should present their vehicle for relicensing before the proposal to mandate the maximum operating age is introduced on 1 November 2019.
- 8.4 The LPG grant scheme to convert Euro 5 taxis to LPG would open to applications on 1 November 2019.
- 8.5 The age limit exemptions for alternative fuels, classic/niche vehicles and hardship would be withdrawn on 1 November 2019 and thereafter individual applications for exemption will be considered on a case by case basis.

ORIGINATING OFFICER DECLARATION:	Drafting officer to confirm the following (✓)
Drafting officer: <u>Christina Calderato</u> has drafted this report in accordance with TfL procedures and confirms the following:	✓
Sponsoring Director: <u>Alex Williams</u> has reviewed the request and is satisfied it is correct and consistent with TfL's plans and priorities.	✓

Appendices and supporting papers:

Appendix A –Overview of questionnaire responses

Appendix B –List of stakeholder responses

Appendix C - Consultation Report

Appendix D – Integrated Impact Assessment and Supporting Information (February 2019)

Appendix E – LTDA consultation response

Appendix F – TfL Analysis of LTDA Euro 6 Retrofit Proposal in LTDA Consultation Response

Appendix G – Letter from LTDA to the Mayor of London

Appendix H –Mayor of London's response to LTDA's letter

Appendix I – Extract of proposed amendments to the taxi Conditions of Fitness

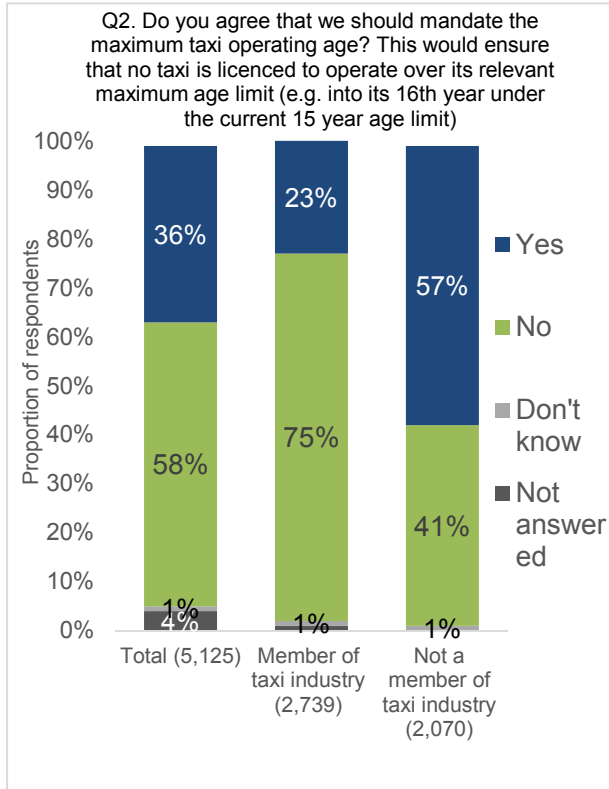
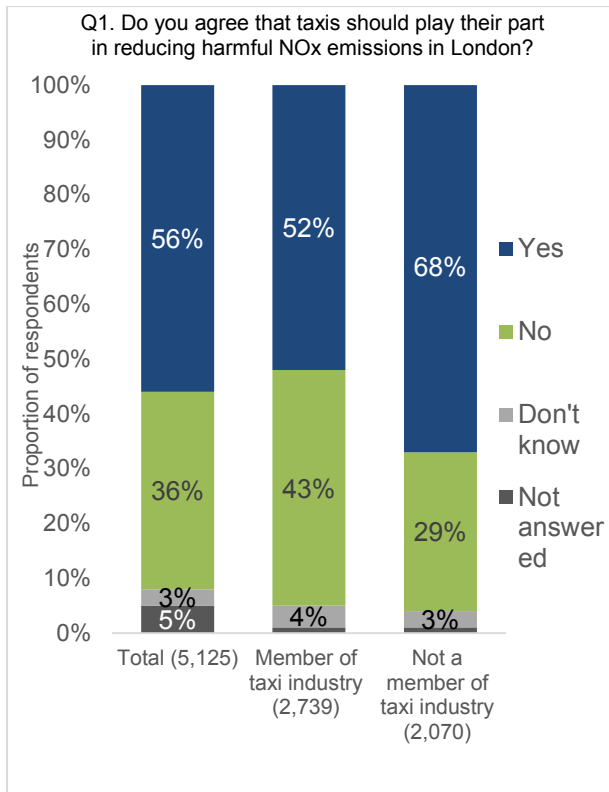
Appendix J – Analysis following Updated LTDA Calculations

ENDS-

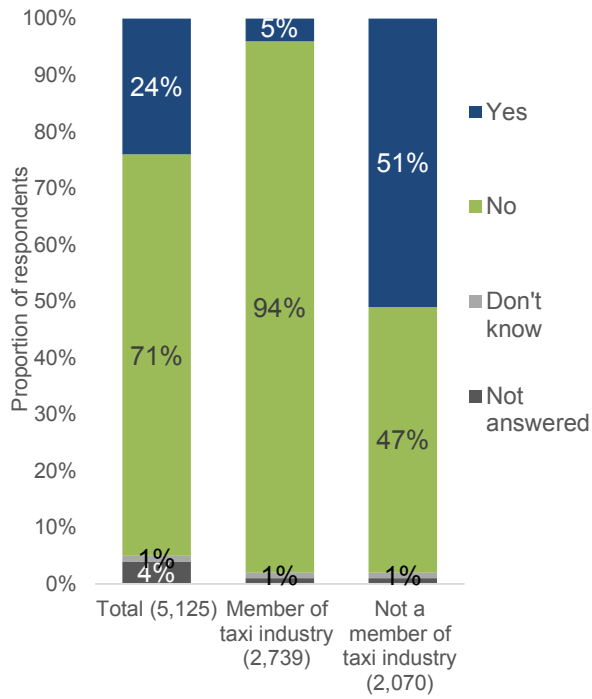
Alex Williams
 Director of City Planning
 City Planning

Christina Calderato
 Head of Transport Strategy and
 Planning
 City Planning

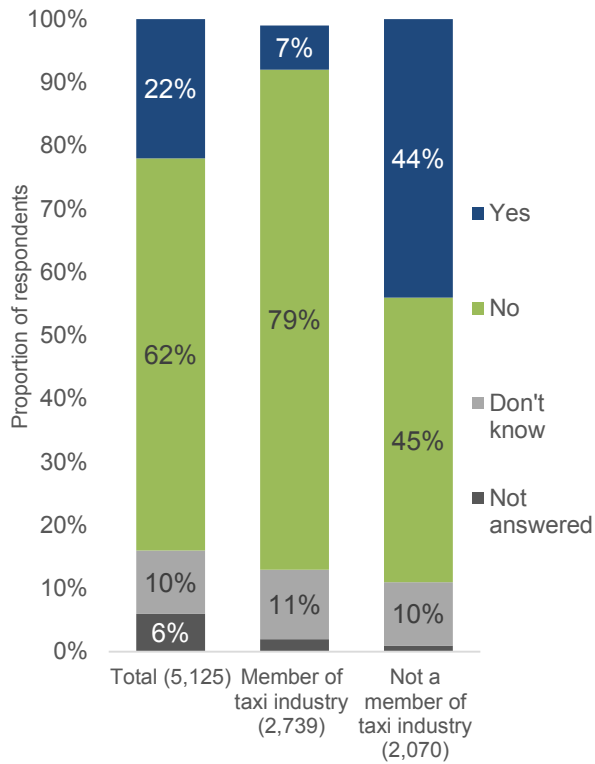
Appendix A – Overview of consultation questionnaire responses



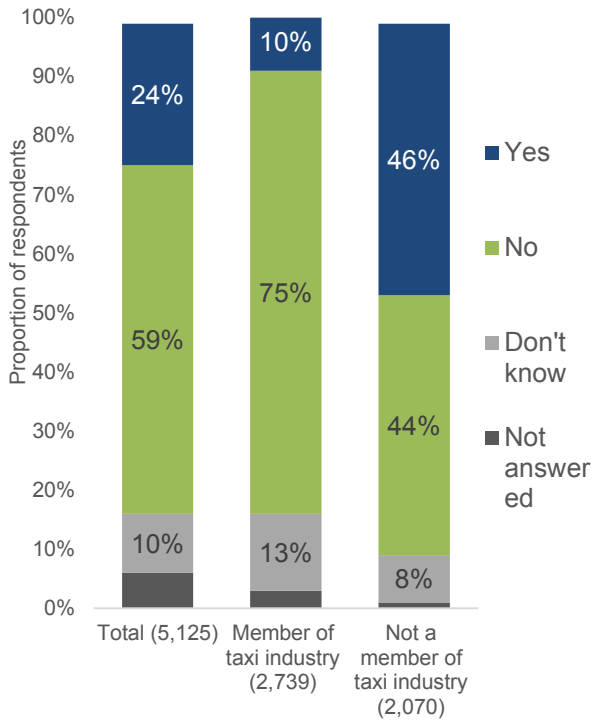
Q3. We propose reducing taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022. We would do so by reducing the maximum age limit for taxis by one year, each year, until then. Do you agree with



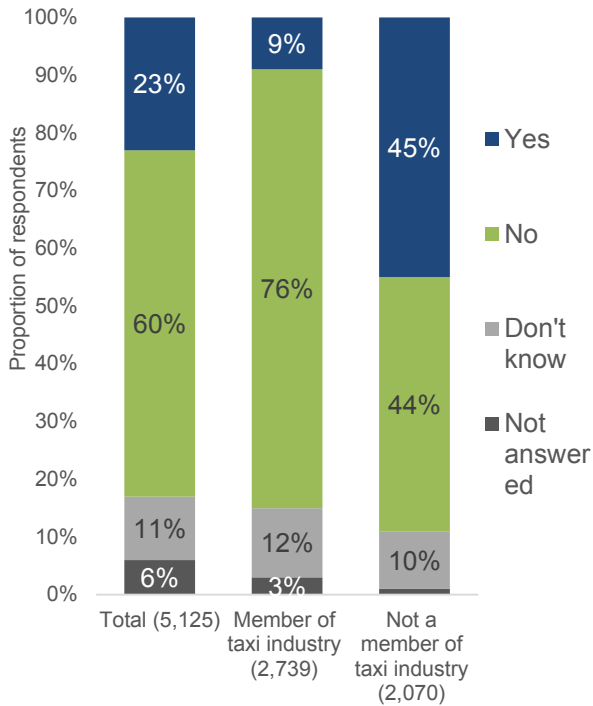
Q4. We propose to remove the alternative fuel, exemption. Do you agree with this proposal?



Q5. We propose to remove the historic and classic/niche vehicle exemption. Do you agree with this proposal?



Q6. We propose to remove the hardship exemption. Do you agree with this proposal?



Appendix B – List of stakeholder responses

Stakeholder	Taxis should play a part in reducing emissions	Mandate maximum taxi operating age	Phased reduction of age limits
Local authorities and Assembly Members			
Brentford council	Yes	Yes	Yes
LB Ealing	Yes	Yes	Yes
Three Rivers District council	Yes	Yes	Yes
LB Lewisham	Yes	Not referenced	Yes
LB Hammersmith and Fulham	Yes	Yes	Yes
Southwark Council	Yes	Yes	Yes
LB Lambeth	Yes	Yes	Yes
Westminster City Council	Yes	Yes	Yes
City of London Corporation	Yes	Not referenced	Tackle highest emitters
Kingston and Sutton Shared Environment Service	Yes	Yes	Yes
Caroline Pidgeon MBE	Yes	Not referenced	Yes
UK100	Yes	Yes	Yes
Regulatory services partnership	Yes	Yes	Yes
Transport industry			
LEVC	Yes	Yes	Yes
The International Council on Clean Transportation	Yes	Yes	Yes
Autogas	Yes	Yes	Yes
Gastech LPG London Taxi Technology	Not referenced	Not referenced	Should be retained for LPG
Campaign Groups			
Southwark cyclists	Yes	Yes	Yes

TfL Restricted

London Living Streets	Yes	Yes	Yes
Make Air Safe Clean	Yes	Yes	Yes
Haringey Living Streets	Yes	Yes	Yes
20s plenty for us	Yes	Yes	Yes
Enfield Cycle Campaign	Yes	Yes	Yes
Clean Air in London	Yes	<i>Re-consult based on their alternative proposals</i>	
London Cycling Campaign	Yes	<i>Not referenced</i>	Yes
Bloomsbury Air	Yes	Yes	Yes
Sustrans	Yes	Yes	Yes
Camden Civic Society's Air Quality, Green Open Spaces and Trees group	Yes	Yes	Yes
Clean Air Brent	Yes	Yes	Yes
West Hampstead Amenity transport	Yes	Yes	Yes
Other			
NW3 Green School Runs	Yes	Yes	Yes
Knightsbridge Residents Management Company	Yes	Yes	Yes
Netley Primary School Air Quality Leader	Yes	Yes	Yes
Love Wimbledon BID	Yes	Yes	Yes
New West End Company	Welcome regulation by TfL to improve air quality	<i>Not referenced</i>	Modest, realistic and timely to reduce limits
Public Health England	Yes	Yes	Yes

TfL Restricted

Trade Unions/ Associations			
LTDA	Yes	No	No
United Cabbies Group	Yes	No	No
Unite the Union	Yes	Yes (at 16 th year)	No
London suburban taxi coalition	Yes	Yes	No
RMT	Yes	No	No
GMB Union	Yes	No	No
London Motor Cab Proprietors Association	<i>Not referenced</i>	No	No
Wider taxi and private hire stakeholders			
Cabvision Ltd	Yes	Yes	No
City of Salford PHV association	Yes	Yes	Yes



Taxi age limits consultation

Consultation Report
July 2019

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Executive summary

Context

The Mayor's Transport Strategy states that the Mayor will, through Transport for London (TfL), 'work with stakeholders to produce and implement a comprehensive plan to encourage and accelerate the transition from diesel-powered taxis to Zero Emission Capable (ZEC) vehicles by providing financial incentives, the necessary infrastructure and regulation (including maintaining a taxi age limit, currently set at 15 years) with the objective of achieving a minimum of 9,000 such vehicles in the fleet by 2020¹.'

Air pollution from taxis is a big public health issue. Taxis contribute 25 per cent of nitrogen oxides (NOx) road transport emissions in central London and from 2019 will be the largest single source of road transport NOx in central London (due to recent improvements across the rest of the fleet, TfL estimates that this figure is now nearer 30 per cent²). NOx causes a major toll of death and serious illness in London.

It is also a legal issue. To safeguard public health, legal limits have been set at the EU level for concentrations of pollutants in outdoor air. The UK has been in breach of these legal limits ever since they were brought into force. In order to conform with the EU legislation, National Air Quality Objectives have been established and legal commitments set. If we are to meet the UK's legal commitments then we must reduce NOx emissions from taxis in central London by 65 per cent by 2025 (compared to 2013 levels), amongst other requirements. Taxis need to meet their share of reducing emissions in London.

By 2019, it was clear that we were not on track to meet the 2020 target of 9,000 ZEC taxis – equivalent to a 45 per cent reduction in taxi emissions and applications to the delicensing scheme available at the time was also very low.

At the time of setting this target in 2015, it was made clear (in the Ultra Low Emission Zone Further Licensing Proposals for Taxi and Private Hire Vehicles Consultation Report) that if targets were not on track to be met, further action would need to be taken.

¹ Proposal 30 of the Mayor's Transport Strategy, 2018

² The London Atmospheric Emissions Inventory (LAEI) in 2013 indicated that taxis contributed 16 per cent of central London road transport emissions. The 2016 LAEI estimates that taxi emissions in 2016 were 20 per cent of central London road transport emissions. The estimate for 2019 taxi emissions assumed in consultation materials was based on the most recent LAEI data available (2013), January 2019 TfL Taxi License data and baseline 2019 emissions projections. This estimated that taxi emissions in 2019 (i.e. currently) account for 25 per cent of central London road transport emissions. In 2020, we estimate that taxi emissions will be at least 30 per cent of central London road transport emissions. This is the case under any of the scenarios (30 per cent with under the consultation age limit proposals, and higher under scenarios which do not include reducing taxi age limits).

In the intervening period, the Ultra Low Emission Zone (ULEZ) has been launched in the same area as the Congestion Charge Zone. Taxis are exempt from ULEZ on the basis that drivers are legally obliged to use a certain kind of vehicle that has been purpose built to navigate London's roads and is wheelchair accessible. In addition, taxi emissions were being tackled separately through the requirement that only ZEC taxis could be newly licensed from 1 January 2018 as well as the taxi delicensing scheme and the 9,000 ZEC target for 2020. We now know that the 2020 target will not be met and that less than 25 per cent of taxis in the ULEZ are compliant with ULEZ standards (Euro 6 for diesel vehicles). This compares to around 75 per cent compliance for other vehicle types.

After considering (and modelling the air quality impacts) of a range of options to address taxi emissions earlier this year, TfL considered that a reduced taxi age limit to 12 years would be needed to deliver the reduction in taxi emissions required to achieve compliance in 2025. It was however considered that in order to mitigate the impact on the taxi trade, the age limit reduction could be phased, reducing by one year each year until the taxi age limit was 12 years in 2022. This phased approach was proposed to give the trade more time to adjust and plan ahead. The options considered are set out in the Integrated Impact Assessment (IIA) that supported the consultation.

The IIA considered the impacts of the proposals under three main categories; London's environment, health and equality, and economy. An IIA enables decision makers to consider both positive and negative potential impacts that proposed changes may have. The primary aim of the IIA is to identify the likely significant impacts and secondly, where possible, to suggest amendments to the proposals or mitigations to minimise any negative impacts of the proposals or enhance positive impacts, should they be implemented.

TfL consulted on these proposals between 15 February and 26 April 2019 in order to understand people's views and gather more information, options or analysis to help reach an informed decision. The consultation indicates levels of public and stakeholder support, which will also be considered, but are not in themselves conclusive.

This Consultation Report

This document explains the processes, responses and outcomes of the consultation to reduce taxi emissions. The proposals can be summarised as: mandating the maximum taxi age limit, phased reduction of the taxi age limit to 12 years by 2022 for Euro 3, 4 and 5 taxis and removing age limit exemptions for hardship, historic and classic/niche vehicles, and alternative fuel vehicles.

This report also presents our responses to issues raised during the consultation and our response to them.

The consultation received 5,125 responses to the online consultation questionnaire. 49 stakeholders also responded to the consultation.

In total, 56 per cent of respondents agreed that taxis should play their part in reducing harmful NOx emissions in London. Approximately half (52 per cent) of members of the taxi trade (including taxi drivers and owners) agreed. Agreement was higher among those not involved in the taxi trade at 68 per cent.

Just over a third of total respondents (36 per cent) agreed that the maximum taxi operating age should be mandated. Agreement was lower among members of the taxi trade (23 per cent) and higher among those not involved in the taxi trade (57 per cent).

Agreement with the proposals to reduce taxi NOx emissions by reducing the taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022 was very low among members of the taxi trade (5 per cent). Agreement was higher among those not involved in the taxi trade, at 51 per cent. The total level of agreement among all respondents was 24 per cent.

Summary of issues raised during consultation

Some of the most frequent comments and suggestions regarding the proposals were to offer assistance, grants or subsidies for taxis and to reduce the number of, or ban, private hire vehicles (PHVs).

When asked for suggestions of other ways to reduce NOx emissions from taxis by 65 per cent by 2025, those in the taxi trade most frequently mentioned offering assistance for taxi purchase and reducing the number of PHVs. Taxi trade respondents also mentioned that it is unfair to change the goalposts on taxi age limits and the potential for hardships for taxi drivers.

Non-taxi trade respondents raised similar issues, while acknowledging that taxis contribute to pollution and believing that the proposals will lead to reduced emissions. Some who agreed with the proposals suggested that taxis should pay the ULEZ charge, that taxis should be stopped from idling and that the age limit should be reduced sooner.

The most frequent response among both taxi trade and non-trade respondents regarding the proposal of a 15 year limit for Euro 6, LPG and ZEC taxis was that these vehicles should not have a maximum age limit, with some mentioning that taxis are too expensive to have a maximum age limit. Some agreed that the limit should remain at 15 years. Among those who disagreed with the proposal, some stated that these types of taxis are less polluting than other vehicles.

The treatment of Euro 6 taxis was considered in developing the proposals for consultation. Although not as clean as alternatively fuelled vehicles such as ZEC or

LPG taxis, it was considered that Euro 6 should qualify for a 15 year, rather than a 12 year age limit for the following reasons:

- Emissions are lower than those of Euro 3, 4 and 5 taxis
- They would have been purchased relatively recently as the best performing vehicles in terms of emissions
- They meet the emissions standards (equivalent of diesel Euro 6) that apply to other light vehicles

When asked whether there are any additional impacts that should be borne in mind with regard to the proposals, many mentioned the potential for taxi trade hardship, particularly for those approaching retirement. Financial hardship was mentioned, along with the fact that taxis are expensive to buy or rent. Some also mentioned hardships for part time drivers or those with lower mileage.

Respondents were also asked for their views on the IIA including any additional impacts or other groups that may be affected by the proposals. Respondents were asked to suggest any ideas they had about how to mitigate these impacts. The potential to convert Euro 5 vehicles to Euro 6 standard was the most frequently mentioned suggestion, with others mentioning the potential for hardship and the unfairness of changing the rules on the maximum age limit. This was put forward in some detail in the Licensed Taxi Drivers' Association's (LTDA) consultation response. This is covered in more detail in the following section.

In meetings following the end of the consultation, taxi trade members have raised concerns about the rental costs and availability of vehicles. The cost of vehicle rental potentially posing a barrier for some, especially older, drivers was identified in the IIA. The proposals include provision for drivers to convert Euro 5 taxis to LPG to qualify for a 15 year age limit and keep them in the fleet for longer, and delicensing payments may help some drivers with the cost of vehicle rental or purchase. It is estimated that the two current suppliers of the LPG systems could convert in excess of 500 taxis per annum.

There is no restriction on the availability of new ZEC vehicles at the time of writing, with new vehicles available within two weeks of placing an order. A second ZEC taxi model is being developed which, provided TfL's Conditions of Fitness are met, is expected to be available to purchase in the coming months. . The IIA set out options available to drivers affected by age limit proposals in Table 16 in section 7.3.

LTDA alternative proposal

In the LTDA consultation response, an alternative proposal to reduce NOx emissions from taxis was put forward. In summary the LTDA proposal includes:

- Mandating 15 year expiry on 1 November 2019 (as set out in our consultation proposals)

- Retaining a 15 year age limit for all taxis
- Mandating retrofit of all Euro 5 taxis to Euro 6 standards (TfL funded from the £42m taxi delicensing fund)

The LTDA calculated what a TfL funded, mandated Euro 5 to Euro 6 conversion with a rolling programme of conversions over three years would deliver, and suggested that it would deliver greater NOx reductions, and more quickly, than the age limit proposals.

We have modelled the proposals on a like for like basis with proposals to reduce taxi age limits for Euro 3, 4 and 5 taxis to 12 years by 2022. The results of the modelling show that a Euro 6 retrofit programme does not achieve greater NOx savings than age limit proposals, and misses the 2025 target reductions by 10 per cent. This is explained in more detail in Chapter 5.

Next steps

This report and its findings will form part of the decision making process on whether to implement the proposals contained in the consultation. The decision is an important one, with a very strong environmental and public health mandate, yet with some significant disadvantages (primarily economic) to some. The consultation has helped to inform where this difficult balance should lie. It will provide decision makers with the issues raised during consultation, to be considered alongside the IIA. The consultation also provides an indication of levels of support for the proposal amongst respondents. This will also be considered but is not necessarily decisive.

If approved by TfL, the proposal to mandate the maximum operating age would begin in November 2019, with the phased reduction in age limits being introduced every year after that until reaching 12 years in 2022.

The LPG grant scheme would launch in November 2019.

The proposals to remove the age limit exemptions for alternative fuels, classic/niche vehicles and hardship would be introduced on 1st November 2019.

1. About the proposals

1.1 Introduction

The Mayor's Transport Strategy, published in March 2018, highlights the urgent need to take action on London's poor air quality. It is clear that air pollution caused by diesel vehicles, particulate matter (PM) and high levels of nitrogen dioxide (NO₂) shorten the lives of Londoners. London's transport network must contribute to meeting legal emission limits as soon as possible.

The seriousness of the issue and complexity of its causes require a range of solutions to address London's emissions crisis. TfL is committed to a range of initiatives to improve London's air quality. This includes the ULEZ introduced in April 2019, which requires vehicles to meet strict emissions standards or pay a charge. In April, the Ultra Low Emission Discount for the Congestion Charge was also replaced with the new, phased Cleaner Vehicle Discount requiring vehicles to meet higher environmental standards. TfL is also taking steps to reduce emissions from the bus fleet including new Low Emission Bus Zones and continuing to roll out Ultra Low Emission Double Deck buses in central London. London's transport network including the bus, private hire and taxi fleets must all do their part to clean up London's air.

London's taxis are recognised as an icon across the globe and are integral part of our transport network. Historically taxi drivers have had a limited choice of heavy diesel vehicles and this has led to the taxi fleet becoming a significant contributor to poor air quality, particularly in central London.

Taxis contribute 25 per cent of NO_x road transport emissions in central London and from 2019 will be the largest source of road transport NO_x in central London (due to recent improvements across the rest of the fleet, TfL estimates that this figure is now nearer 30 per cent).

1.2 Purpose

The taxi age limit proposals were designed to reduce emissions from taxis in London. By law, the UK must reduce NO_x and other harmful emissions as quickly as possible. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent, based on 2013 levels. Unless further action is taken now, taxi related NO_x emissions will reduce by less than 10 per cent by 2020.

TfL has previously consulted on reducing taxi age limits as part of a consultation in 2015. Following the consultation it was decided to retain the 15 year age limit. Instead, a target of 9,000 ZEC taxis to be in service by the end of 2020 was set. This approximated to a 45 per cent reduction in taxi NO_x emissions from 2013 levels. However it was stated at the time that the policy would be revisited if the targets set were not on track to be achieved by 2020.

In 2015, TfL introduced complementary measures for taxis including a delicensing scheme for eligible owners. The original taxi delicensing scheme was designed to increase the uptake of ZEC vehicles and remove the oldest taxis from the fleet. Payments were offered to taxi owners to delicense their vehicle before it reached the 15-year age limit. The scheme operated on a sliding scale reflecting the number of 'plates' (years) available. However the scheme had a limited impact with only around 200 payments requested by taxi owners over the 18 months the scheme was open.

To encourage more owners to delicense the most polluting taxis early, we significantly enhanced the scheme. As enhanced, 1,250 top payments of £10,000 have been made available to owners of taxis younger than 13 years. There are also 1,000 payments of £1,000 available for 13 and 14 year old taxis. Initially launched on 14 January 2019, the scheme was expanded and restructured based on high levels of uptake and stakeholder engagement. However, more needs to be done to remove the oldest taxis from the fleet.

We undertook an option selection process assessing a range of options to achieve the necessary reduction in emissions from taxis. The process concluded in a package of measures that provides the greatest level of certainty of emissions savings in balance with the impact on the taxi trade. The proposals are discussed in detail in the next section.

1.3 Detailed description

We proposed changes to the current taxi age limit and 'category' age limit exemptions. Taxi vehicle age limits are calculated from the date of the vehicle's first registration with the DVLA under the Vehicle and Excise Registration Act 1994. The maximum taxi age limit is currently 15 years. The full list of proposals are explained in full below.

1.3.1 Mandate the maximum operating age

The maximum age limit for taxis for vehicle licensing purposes is set out in section 5A of the Conditions of Fitness. The current maximum age for a taxi in London is 15 years. Taxis have been permitted to be licensed for 12 months at any point in their 15th year. This means they can receive a new 12 month license up until the day before the taxi reaches 15 years old. This means that taxis have effectively been able to operate into their 16th year and therefore beyond the maximum age limit.

By mandating the maximum operating age, this proposal will ensure that no taxi is licensed to operate beyond its relevant maximum age limit (i.e. into its 16th year with a 15 year age limit as is currently the case). This will be mandated by keeping the 12 month licence for taxis but communicating that in order to operate into its 15th year, a new licence will be required by the taxi's 14th birthday. The maximum age limit will apply to the relevant age limit for all taxis, including those that have qualified for an

age limit exemption, e.g. taxis which were granted a five year extension to their age limit under the previous LPG conversion age limit exemption and therefore have a 20 year age limit. This is proposed to be introduced in November 2019.

1.3.2 Phased age limit reduction

We propose to reduce the maximum allowable age limit for Euro 3,4 and 5 taxis to 12 years by 2022. The maximum age limit will reduce by one year, in the November of each year until 2022, as shown in the table below.

Year	Proposed maximum taxi age limit
2019	15
2020	14
2021	13
2022	12

The 15 year maximum age limit will be retained for taxis which meet the Euro 6 standard for emissions, have been newly converted to run on Liquid Petroleum Gas (LPG) or meet ZEC taxi requirements. Taxis which were granted a five year extension to their age limit under the previous LPG conversion age limit exemption will not be affected (i.e. they keep the 20 year age limit). However any newly converted vehicles will be subject to a 15 year maximum age limit.

1.3.3 Remove the alternative fuel exemption

Although the maximum taxi age limit is 15 years, a limited number of exemptions have been available. The alternative fuel conversion exemption is available to taxis that have been converted to LPG, compressed natural gas (CNG) or biomethane. We proposed to end the alternative fuel exemption to the taxi age limit. To date only 69 taxis have been converted to LPG and no taxis have been converted to CNG or biomethane. In 2017, 17 vehicle owners applied for an extension to their licence based on an alternative fuel conversion. As mentioned, taxis which have already been granted a five year extension to their age limit under the previous LPG conversion age limit exemption will not be affected (i.e. they keep the 20 year age limit).

1.3.4 Remove the historic and classic/niche vehicle exemption

This exemption was introduced to allow Asquith taxis to operate for an additional five years. There are no longer any licensed taxis which are eligible for this exemption.

1.3.5 Remove the hardship exemption

The hardship exemption was introduced in 2012 to permit an exemption to the age limit to allow an additional 12 months licence on a case by case basis. This was introduced for taxi owners in cases of exceptional hardship such as medical issues. In 2017, approximately 70 drivers applied for an extension to their licence based on extenuating/hardship circumstances.

Under the consultation proposals, TfL will continue to be able to grant hardship exemptions in exceptional circumstances, including for example, serious illness, but this will be considered on a case by case basis.

1.4 Who is affected and what options do they have?

The following table from the IIA sets out the number of vehicles affected by the proposals to mandate the maximum operating age and the phased age limit reductions by Euro standard. It is based on the fleet breakdown in January 2019.

Euro standard	Numbers of vehicles affected and delicensing payments available	Impacts of proposals	
		Mandating maximum age	Phased age limit reductions
2 (aged 17+)	<ul style="list-style-type: none"> There are six Euro 2 vehicles in the fleet (as of Jan 2019), all are over the age of 15 and would not be affected by the 'mandating the maximum age limit' proposal if introduced in Nov 2019. These vehicles are not eligible for a delicensing payment. 	Vehicles unaffected as have already been licensed for the last time.	Not affected
3 (aged 12-16)	<ul style="list-style-type: none"> Euro 3 vehicles are amongst the oldest in the fleet and all 4,810 (in the fleet as of Jan 2019) are potentially impacted by the proposals to mandate the maximum operating age and the phased age limit reduction Euro 3 vehicles will lose a maximum of one year's operation as a result of the phased age limit reductions. 1,000 delicensing payments are available (from 14th Jan 2019) for vehicles between 13 and 15 years of age with 2,416 vehicles eligible to apply. 4,100 higher delicensing payment available for vehicles younger than 13 (1445 euro 3s are younger than 13). 	<p>1000+ vehicles affected in 2019, no delicensing payment available</p> <p>Vehicles aged 14 or older on 1st November 2019 would not be able to relicense.</p>	3,800 vehicles lose 1 year operation, 5,100 delicensing payments available for vehicles younger than 13 years and 1,000 delicensing payments available for vehicles between 13 and 15 years of age
4 (age 7-11)	<ul style="list-style-type: none"> 7,023 taxis (in the fleet as of Jan 2019) are potentially impacted by the phased age 	None in 2019	7,023 vehicles lose 2 or 3

	<p>limit reduction.</p> <ul style="list-style-type: none"> Depending on their age Euro 3 vehicles will lose either 2 or 3 years operation as a result of the phased age limit reductions. 4,100 higher delicensing payments are available for vehicles younger than 13 (all 7,023 euro 4s are younger than 13). 		<p>years operation, 5,100 delicensing payments available</p>
5 (age 3-6)	<ul style="list-style-type: none"> 4,602 taxis (in the fleet as of Jan 2019) are potentially impacted by the phased age limit reduction. Vehicles will lose 3 years operation as a result of the phased age limit reductions, unless converted to LPG 4,100 higher delicensing payments are available for vehicles younger than 13 (all 4,602 euro 5s are younger than 13). 1000 LPG conversion grants of £5,000 available to Euro 5s (except Mercedes Vitos) 	None in 2019	<p>4,602 vehicles lose 3 years operation, 5,100 delicensing payments available, no vehicles leave fleet until 2025 1000 LPG conversion grants of £5,000 available to Euro 5s (except Mercedes Vitos)</p>

Figure 1: Impacts by Euro standard (as of Jan 2019) – (Originally published as Figure 17 in Information and Integrated Impact Assessment document)

Owners of Euro 2, 3, 4 and 5 taxis will all be affected, to differing extents, by the proposals to mandate the maximum operating age or the phased age limit proposals. This accounts for approximately 16,000 vehicles in the fleet as of January 2019.

The options for owner-drivers who are affected by proposals to mandate the maximum operating age and the phased age limit reductions are set out in the table below.

Option	Description	Impact
Sell / delicense and lease a replacement vehicle	<p>For drivers who were intending to work the final years of their career in a vehicle that would be delicensed earlier, it would be possible to lease a replacement vehicle rather than purchasing a new one.</p> <p>5,100 delicensing payments of £1k to £10k (first come first served)</p> <p>Rental costs for a diesel taxi</p>	<p>This is an option for those who do not wish to purchase a new vehicle but wish to stay in the trade. Unlikely to be worthwhile for drivers who do low annual mileage.</p>

	currently start at around £125 pw, with prices varying depending on age and whether insurance and maintenance is included. There are additional operating costs, in particular, fuel.	
Sell / delicense and leave trade	5,100 delicensing payments of £1k to £10k (first come first served)	TfL does not have access to information on driver income but the financial impact will depend on the amount of delicensing payment, or value of the vehicle.
Sell / delicense and buy a second hand vehicle (diesel)	5,100 delicensing payments of £1k to £10k (first come first served) Second hand vehicles readily available and low cost (a 9 year old vehicle is currently available for around £5k)	Dependent on delicensing payment received but higher payments could cover the cost of a replacement second hand vehicle for some drivers.
Convert Euro 5 taxis to LPG	1,000 LPG conversion grants of £5,000 are available to all Euro 5 taxis apart from Mercedes Vitos (32 per cent or 1,474 of Euro 5s are Vitos).	Vehicle owners will have to pay the additional cost, circa £7k to convert. Fuel savings of 20 per cent compared to diesel. Unlikely to be worthwhile for owners of older vehicles who do medium to low annual mileage. Drivers with high mileage or younger vehicles could benefit from significantly reduced running costs as well as a 15 year age limit.
Share a vehicle with someone else	Depends on specific arrangement but likely to be lower cost than leasing or purchasing a vehicle outright.	Reduced purchase / rental costs but also reduced availability so will only work for some drivers.
Sell/ delicense and purchase a new ZEC taxi	Purchase a new ZEC taxi 5,100 delicensing payments of £1k to £10k (first come first served) LEVC offer a PCP ³ for £183 pw, payable for 60 months, with a deposit of £3750 and an optional balloon payment of £19,258 (LEVC) if the driver wishes to purchase the vehicle outright after 60 months. A new ZEC taxi also offers reduced fuel and maintenance costs, but higher insurance costs, reflecting the higher value of the vehicle.	Government grants to support drivers with purchasing ZEC taxis are available, along with private sector financing arrangements. However, the cost may be prohibitive for some drivers

³ A personal contract purchase (PCP) is a form of leasing with an option to purchase. A PCP is structured with payments over the contract period, and an optional balloon payment at the end of the agreement if the customer wishes to purchase of the vehicle.

Figure 2: Options for taxi owner drivers and related impacts

1.4.1 What could this mean for London taxi drivers?

To help illustrate how the proposals could affect London taxi drivers, a few illustrative scenarios are set out below. These are not intended to be exhaustive or precise. Each taxi driver will be in a different position. There are also other costs, such as insurance, maintenance, tax and fuel. For example, new ZEC vehicles have low fuel and maintenance costs, but higher costs of purchase and insurance. But the examples help to convey the anticipated impacts and demonstrate the options available for different situations.

Taxi driver A

A is 60 years old, holds a suburban licence, and has a low annual mileage. He owns outright a 14 year old black cab. His weekly diesel costs are around £100⁴. He plans to retire when he reaches state pension age, 66 years.

With a 14 year old vehicle, if the proposals go forward, taxi driver A will need to relicence before November 2019 in order to keep the taxi running a further year. After that it will not be possible to relicence.

Taxi Driver A will then have three options:

Option 1: A five year old, Euro 5 taxi would cost around £23,000 to purchase outright at current prices. As driver A's vehicle is 14 years old, he would be eligible to apply for a delicensing payment of £1,000. The residual value of his existing vehicle is likely to be low, perhaps £500. A's new Euro 5 taxi could be relicensed until at least A's planned retirement date.

Option 2: Given his low mileage and expected retirement date, A may not want to purchase a replacement vehicle. Leasing a vehicle could be a good option. An older vehicle at a lower weekly price may be most suitable (rental costs currently start at around £125 pw for an older diesel taxi). A leasing arrangement gives increased flexibility. Given the driver's low mileage and limited area of operation, the higher weekly rental for a ZEC taxi may not be appropriate.

Option 3: Converting to LPG before the November 2019 deadline would cost A around £8-10,000 but would extend the life of his vehicle to 20 years. He could keep his existing vehicle until his planned retirement date. Driving an LPG taxi could also save 20 percent on fuel costs.

⁴ LEVC running costs calculator (www.levc.com/tx-cost-comparison). High mileage drivers have costs of around £140 per week for fuel.

Taxi driver B

B has an all London licence. She is 40 years old and has a high annual mileage. She owns a 12 year old vehicle outright. Her taxi will be able to continue to be licensed until it turns 14 in 2021. After this she will not be able to relicence her taxi as the age limit will reduce to 13 years in November 2021.

B is in an excellent position to take advantage of ZEC vehicles, with financing available to take advantage of the cheaper running costs.

Option 1: A new ZEC taxi costs around £55,000 (including the subsidy payment of £7,500) if bought outright. Financing is available and with a deposit of £10,000, she might pay around £228 per week towards purchasing a LEVC TX model.

Alternatively, PCP financing would enable B to pay a lower deposit and lower monthly payments, and decide in 5 years time whether to buy her ZEC taxi outright.

Given the age of her current vehicle, B could get a delicensing payment of up to £10,000 to put towards a deposit for a new vehicle. In addition, she could also realise the residual value of her current taxi, potentially around £3,000. As she is a high mileage user, driving a ZEC taxi should also save £100 a week on fuel (ZEC average fuel costs are around £41 per week).

Option 2: B could decide to wait for more choice on the market, as the new all electric Nissan taxi is due to be released later this year, and is expected to have a significantly lower full price than the LEVC taxi.

Taxi driver B is in a strong position to take advantage of ZEC vehicles, with finance available to realise cheaper running costs.

Taxi driver C

Taxi driver C is 25 years old, holds an all London licence and does a high annual mileage. He leases a 13 year old taxi. He currently pays around £150 per week to lease his cab. Vehicles which are 13 years old in November 2019 will reach the reduced age limit of 14 years in November 2020.

C does not benefit from delicensing payments and he cannot raise funds from selling the vehicle as he does not own his taxi. His best option is likely to be to lease or enter into a PCP finance arrangement for a ZEC taxi.

A PCP finance arrangement advertised by LEVC⁵ for a ZEC taxi costs £183 pw, payable for 60 months, with a deposit of £3,750 and an optional balloon payment after 60 months of £19,258. Alternatively, C could lease a new ZEC cab.

⁵ <https://www.levc.com/finance/latest-offers/>

1.5 How much notice will taxi owners have?

The notice periods that would be applicable if the decision to implement proposals were to be taken in July 2019 are:

- Vehicles which are due to be 14 years old at the time when the proposals come into force in November 2019 will be able to relicense before that in order to be able to operate for another year.
- Vehicles which are 13 years of age in November 2019 will reach the reduced age limit of 14 in November 2020
- Vehicles which are 12 years of age in November 2019 will turn 14 in 2021 after which they will not be able to be relicensed, the age limit will reduce to 13 years in November 2021
- Vehicles which are 11 years of age in November 2019 will turn 13 in 2021 after which they will not be able to be relicensed because the age limit will reduce to 13 years in November 2021
- Vehicles which are 10 years of age in November 2019 will turn 13 in 2022 after which they will not be able to be relicensed, the age limit will reduce to 12 years in November 2022

Euro 5 taxis would not be affected by the age limit proposals until 2024.

2. About the consultation

2.1 Purpose

The objectives of the consultation were:

- To give stakeholders and the public easily-understandable information about the proposals and allow them to respond
- To understand the level of support or opposition for our proposals
- To understand any impacts of the proposals of which we were not previously aware
- To understand concerns and objections
- To allow respondents to make suggestions or put forward alternative proposals

2.2 Potential outcomes

The potential outcomes of the consultation are:

- Following careful consideration of the consultation responses, we decide to proceed with the proposals as set out in the consultation
- Following careful consideration of the consultation responses, we modify the proposals in response to issues raised and proceed with a revised approach
- Following careful consideration of the consultation responses, we decide not to proceed with the proposals

Conclusions and next steps are set out in Chapter 6.

2.3 Consultation history

In 2015, TfL consulted on reducing the taxi age limit to 10 years, 12 years or remaining at 15 years with a range of incentives to drive uptake of Zero Emission Capable (ZEC) taxis. Following the consultation, it was decided to retain the 15-year age limit. Instead, the target of 9,000 ZEC taxis to be in service by the end of 2020 was set, supported by a taxi delicensing fund, which was approximated to amount to a 45 per cent reduction in taxi NOx emissions from 2013 levels. However, it was stated in the Ultra Low Emission Zone Further Licensing Proposals for Taxi and Private Hire Vehicles Consultation Report (2015) that the policy would be revisited if the targets set to enable the necessary changes to the fleet were not on track to be achieved by 2020.

A number of changes were made in order to drive the uptake of ZECs including amending licensing regulations so that from January 2018 all newly licenced vehicles had to be ZEC, introducing a delicensing scheme and providing grants towards the purchase of ZECs. For further information on this consultation please see our website (<https://consultations.tfl.gov.uk/environment/ultra-low-emission-zone/>).

2.4 Who we engaged / consulted

In December 2018, we telephoned taxi trade representatives to inform them of our intention to consult on a reduced taxi age limit (also publicised via a press release). Subsequently, in January 2019, taxi driver representative groups, manufacturers and LPG conversion companies and taxi proprietors were invited to attend stakeholder workshops to gain their input into the Integrated Impact Assessment.

The consultation opened on 15 February 2019, was open to anyone to respond and was advertised via the press, social media, taxi trade material and emails to the taxi trade.

We emailed members of the taxi trade including known taxi drivers, taxi operators and owners to alert them to the consultation and invite them to respond. A copy of the email we sent can be found in Appendix C.

The table below provides a breakdown of the stakeholder groups and how many emails were sent to each group.

Emails sent to stakeholder groups	Number of emails sent
Private Hire Vehicle operators	2100
Taxi & PHV drivers	129,000
Taxi & PH vehicle owners	60,000
Taxi driver applicants	3,700
People who want to receive taxi and PHV information	1,550
Stakeholders (comprising London Local Authorities, Business Improvement Districts, MPs/AMs, Health Trusts, transport operators/groups, disabled persons representative groups, charities, UK vehicle manufacturers, etc.	880
Total	197,230

Members of the public were also targeted via the press. A copy of the article can be found in Appendix C.

A full list of stakeholders can be found in Appendix D.

2.5 Dates and duration

The consultation was open for 10 weeks between 15 February and 26 April 2019.

2.6 What we asked

We wanted to understand views on the question of whether and how the taxi trade should play their part in reducing emissions in London.

We proposed that the maximum taxi operating age should be mandated. We wanted to know people's views on this proposal.

We proposed that the maximum taxi age limit be reduced to 12 years by 2022 for Euro 3, 4 and 5 taxis. The proposals set out our plans to reduce the age limit in phases, to give taxi owners time to plan ahead and we proposed reducing the maximum age limit by one year, each year, until 2022. The maximum age limit for Euro 6 and ZEC taxis, as well as those newly converted to LPG would remain at 15 years. We wanted to know people's views on this proposal.

We also proposed to remove the age limit exemptions for alternative fuel conversions, historic and classic/niche vehicles and for hardship/personal circumstances. We asked for peoples' views on these specific proposals.

The Integrated Impact Assessment highlighted that our age limit proposals would affect most owners of Euro 3, 4 and 5 taxis. The assessment described in detail the impacts our proposals could cause. We asked for peoples' views on those impacts and to let us know if they thought there were impacts that we had not identified.

We then asked for some personal and equality information from the respondents. A full list of questions asked can be found in Appendix B.

2.7 Methods of responding

Respondents could use the online consultation questionnaire on our website, www.tfl.gov.uk/taxi-age-limit. Alternatively, they could write to our email (consultations@tfl.gov.uk) or our freepost address (FREEPOST TfL Consultations).

2.8 Consultation publicity

As set out above, all taxi and private hire licensees we hold an email address for and relevant stakeholder groups were emailed to promote the consultation and provided the website address. A copy of this email can be found in Appendix C.

The consultation was included in the weekly email bulletin sent to taxi and private hire licensees. A copy of this bulletin can be found in Appendix C

In addition, an article was published on the TfL page of the London Metro newspaper on 14 March 2019 advertising the proposals and website and inviting people to give their views.

A copy of this can be found in Appendix C. A press release on 19 December announced that we would be consulting on these proposals during the early part of 2019. A copy of this can be found in Appendix C.

A press release on 15 February promoted the consultation and the benefits of the proposals. A copy of the press release can be found in Appendix C.

2.8.1 Consultation engagement

Prior to the start of the consultation, we met with taxi trade representatives, manufacturers and proprietors to gain their input into the Integrated Impact Assessment (see Section 2.9). Details of these meetings including attendees can be found below.

Monday 14 January – meeting with trade representatives

National Union of Rail, Maritime and Transport Workers
Unite the Union
Licensed Taxi Drivers' Association (LTDA)
London Cab Drivers' Club

Thursday 17 January - meeting with manufacturers

Autogas
LEVC
Mercedes
Richmond Road Cab Centre
GasTech
Vehicle Repowering Solutions

Thursday 17 January – meeting with taxi proprietors

Cricklewood Carriers Cab Co
Colts Cabs
Black Cab Services
Fulham Cab
E and F Taxis
Mister Taxi
Black Taxi Rentals
Sherbet London
A1 Taxis
Forest Taxis
Gastech

In addition to these meetings there were other meetings with relevant stakeholders at later stages. These included:

Thursday 8 April – meeting to discuss the proposals

LTDA

Thursday 22 May – meeting to discuss alternative proposal

2.9 Integrated Impact Assessment

We published as part of the consultation materials a ‘Consultation Proposals: Information and Integrated Impact Assessment’ document. This explained all the proposals in more detail and provided an Integrated Impact Assessment (IIA). The full document can be found on the consultation website at the following address: https://consultations.tfl.gov.uk/tph/taxi-age-limits/user_uploads/reducing-emissions-taxis-integrated-impact-assessment.pdf. A summary of the impacts by theme is below.

2.9.1 Environment

The phased age limit reductions, alongside benefits resulting from the natural churn in the fleet in line with current trends and delicensing are expected to result in total reduction in taxi emissions of 38 per cent by 2020 and 70 per cent by 2025, as shown in Figure 3 below.

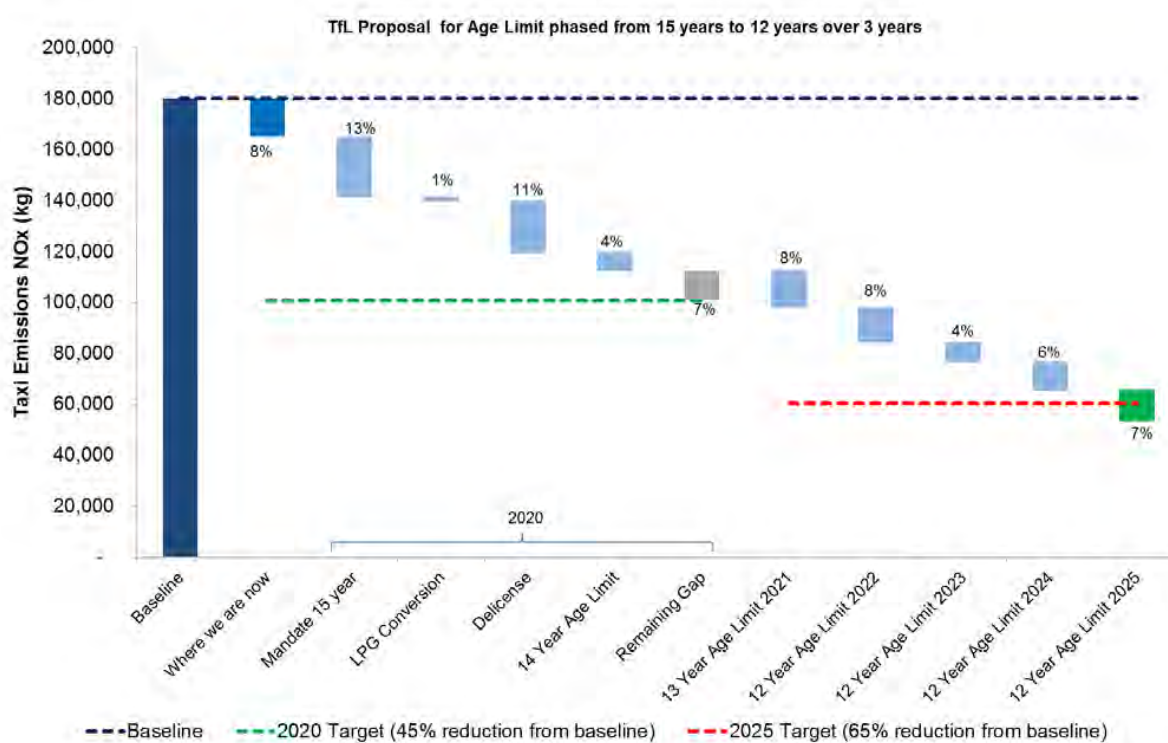


Figure 3: Reductions in NOx emissions as a result of the age limit reduction

2.9.2 Health and equality

- The proposals will result in older taxis leaving the fleet earlier than previously planned. If these older vehicles are not replaced by younger

vehicles then the overall size of the fleet will reduce, as has already been seen to some extent through the requirement for all newly licensed taxis to be ZEC, and the uptake of the taxi delicensing scheme. This would result in improved air quality but may also reduce the availability of taxis in London. As a result the IIA identified the following potential negative impacts which are relevant to the public sector equality duty:

- Accessibility – a reduced fleet size will reduce availability of taxis which will impact taxi users, particularly wheelchair users who have a higher level of reliance on taxis (which are wheelchair accessible), however the number of licensed taxis does not necessarily equate to the number of available taxis at a given time because the mileage for each taxi varies, and older taxis have lower mileage. We will, however, monitor this.
- Safety and crime - if the proposals result in a reduction in the size of the taxi fleet then there may be a small negative impact on safety and crime, particularly on female passengers and trans passengers travelling at night if the supply of available taxis decreases, or wait times increase.
- Access to healthcare and social infrastructure - If the proposals result in a reduction in the size of the taxi fleet then there might be a minor negative impact on access to healthcare and social infrastructure. TfL does not hold any data on the proportion of people who access healthcare and social infrastructure by taxi.
- The IIA included a review of impacts on groups with protected characteristics. It found that 25 per cent of taxi drivers are 60 or above and therefore older drivers could be disproportionately impacted by the proposals.
- Stress and anxiety - If drivers have to work longer hours to maintain a sufficient income then their stress or mental health may suffer, there is evidence that increased working hours can lead to mental ill health or stress⁶.

In terms of vehicle availability, the proposals include provision for drivers to convert Euro 5 taxis to LPG to qualify for a 15 year age limit and keep them in the fleet for longer. It is estimated that the two current suppliers of the LPG systems could convert in excess of 500 taxis per annum.

Delicensing payments may help some drivers with the cost of purchasing a new vehicle. There is no restriction on the availability of new ZEC vehicles at the timing of writing, with new vehicles available within two weeks of placing an order. A second (all-electric) ZEC taxi model is expected to be available to purchase in the coming months. The IIA set out options available to drivers affected by age limit proposals in

⁶ Health and Safety Laboratory (2003) 'Working long Hours'. (http://www.hse.gov.uk/research/hsl_pdf/2003/hsl03-02.pdf)

Table 16 in section 7.3. It is expected that these factors will mitigate lack of vehicle availability.

2.9.3 Economy

Owners of Euro 3, 4 and 5 taxis will all be affected, to differing extents, by the proposals to mandate the maximum operating age or the phased age limit proposals. This accounts for approximately 16,000 vehicles in the fleet as of January 2019. Owners who are impacted have the options to apply for a delicensing payment, sell their vehicle, rent another vehicle, buy a younger vehicle, convert a Euro 5 vehicle to Liquid Petroleum Gas (LPG) or retire from the trade. The drivers who are likely to be most severely affected are those who do low annual mileage or work fewer hours and may therefore not be able to rent or buy a newer vehicle; although drivers of Euro 5 vehicles will also be able to apply for part funding for an LPG conversion to extend the life of their existing vehicle, allowing it to operate for 15 years.

The cost of vehicle rental potentially posing a barrier for some, especially older, drivers was identified in the IIA. In meetings following the end of the consultation and in communications with TPH, taxi trade representatives have reinforced their concerns about the rental costs and availability of vehicles, which they say is becoming more acute with the result that there are drivers unable to find vehicles and so unable to work. The availability of vehicles was also raised by the RMT Union during consultation. It is not possible to verify this claim with certainty, although we will monitor the situation and keep it under review. However, at this stage, a reduction in the number of vehicles does not appear to be a direct result of any proposed changes to age limit, but rather from a combination of the introduction of the ZEC licensing requirement for new vehicles from 1 January 2018 and the enhanced delicensing scheme, which was expanded to provide for additional vehicles to be delicensed (and thereby removed from the fleet) in response to calls from the trade.

There are a number of mitigating measures in the current proposals. There is provision for 1,000 drivers to part fund a conversion Euro 5 taxis to LPG. Payments of £5,000 are available to put towards the total conversion cost (approximately £10,000). A LPG vehicle will continue to qualify for a 15 year age limit. Furthermore, delicensing payments may help some drivers with the cost of vehicle rental or purchase. It is estimated that the two current suppliers of the LPG systems could convert in excess of 500 taxis per annum. It should be noted that Euro 5 taxis will not be affected by the age limit proposals until 2024/5 due to their age profile – the oldest Euro 5 taxis are seven years old and therefore will not be impacted by a 12 year age limit for another five years at minimum.

There is no restriction on the availability of new ZEC vehicles at the timing of writing, with new vehicles available within two weeks of placing an order. A second ZEC taxi

model is being developed which, provided TfL's Conditions of Fitness are met, will be available to purchase in the coming months.

The IIA set out options available to drivers affected by age limit proposals in Table 16 in section 7.3, which can be found at the following address:
https://consultations.tfl.gov.uk/tph/taxi-age-limits/user_uploads/reducing-emissions-taxis-integrated-impact-assessment.pdf

2.10 Analysis of consultation responses

The consultation analysis for this consultation was undertaken by 2CV due to the number of responses received. After a tender process, 2CV were the successful bidder and their analysis can be found from Chapter 3.

Chapter 3 contains their analysis of the respondents and Chapter 4 contains their analysis of question responses. For closed questions, responses were analysed in terms of totals and percentages for each question.

For open questions, the comments received were coded and grouped with the same or similar themed comments which produced the code frames. The code frames were initially developed from the first set of consultation response data sent to 2CV. These subsequently went through two stages of validation.

The final codeframes can be found in Appendix A.

3. About the respondents

This section provides information about the consultation respondents, including how they heard about the consultation and in what capacity they responded e.g. as a taxi user, taxi driver, etc.

Respondents have been classified into two categories: Members of the public and Stakeholders.

Table 1: Members of the public and stakeholders	Total	%
Member of the public	5,125	98%
Stakeholder	49	2%
Total		100%

Tables 2 to 12 as well as results in Chapter 4 shows non-stakeholder responses. Stakeholder responses are summarised in Chapter 4.

3.1 Respondent type

Respondents were asked to state which of the following respondent types best described them.

Table 2: Respondent type	Total	
	Count	%
An All London taxi (black cab) driver	2,476	48%
A Suburban taxi (black cab) driver	193	4%
A taxi (black cab) owner	807	16%
A taxi (black cab) user	598	12%
A Taxicard member	50	1%
A private hire operator	64	1%
A private hire driver	340	7%
A private hire vehicle owner	167	3%
A private hire/minicab user	197	4%
A representative of an organisation	41	1%
A member of the public/not affiliated with the above	1,561	30%
Not stated	316	6%
Total	5,125	100%

Throughout Chapter 4 of this report responses are shown for three groups: Total (all respondents), members of the taxi trade (including All London taxi drivers, Suburban taxi drivers and taxi owners) and respondents who are not members of the taxi trade. In total 2,739 respondents were members of the taxi trade and 2,070 were non-members. Due to 316 respondents not answering the question about respondent type, there are respondents in the 'Total' group who are categorised as neither a member nor non-member of the taxi trade.

For taxi drivers (All London or Suburban), the table below shows type of vehicle driven. The most common taxi driven by respondents was the TX4.

Table 3: Type of vehicle	Total	
	Count	%
TX1	20	1%
TX2	404	15%
TX4	1,496	57%
TXe	147	6%
Mercedes Vito	483	18%
Metrocab	8	0%
Not stated	82	3%
Total	2,640	100%

For taxi drivers (All London or Suburban), the table below shows whether they have had their vehicle converted to LPG.

Table 4: Conversion to LPG	Total	
	Count	%
Yes	34	1%
No	2,417	92%
Rather not say	87	3%
Not stated	102	4%
Total	2,640	100%

For taxi owners, the table below shows number of taxis owned.

Table 5: Number of taxis owned	Total	
	Count	%
Only 1 taxi	725	90%

2 to 50	34	4%
51 to 100	8	1%
101 to 150	0	0%
151 to 200	1	0%
201 to 250	1	0%
251 to 300	0	0%
301 to 350	0	0%
Over 350	2	0%
Not answered	36	4%
Total	807	100%

3.2 How respondents heard about the consultation

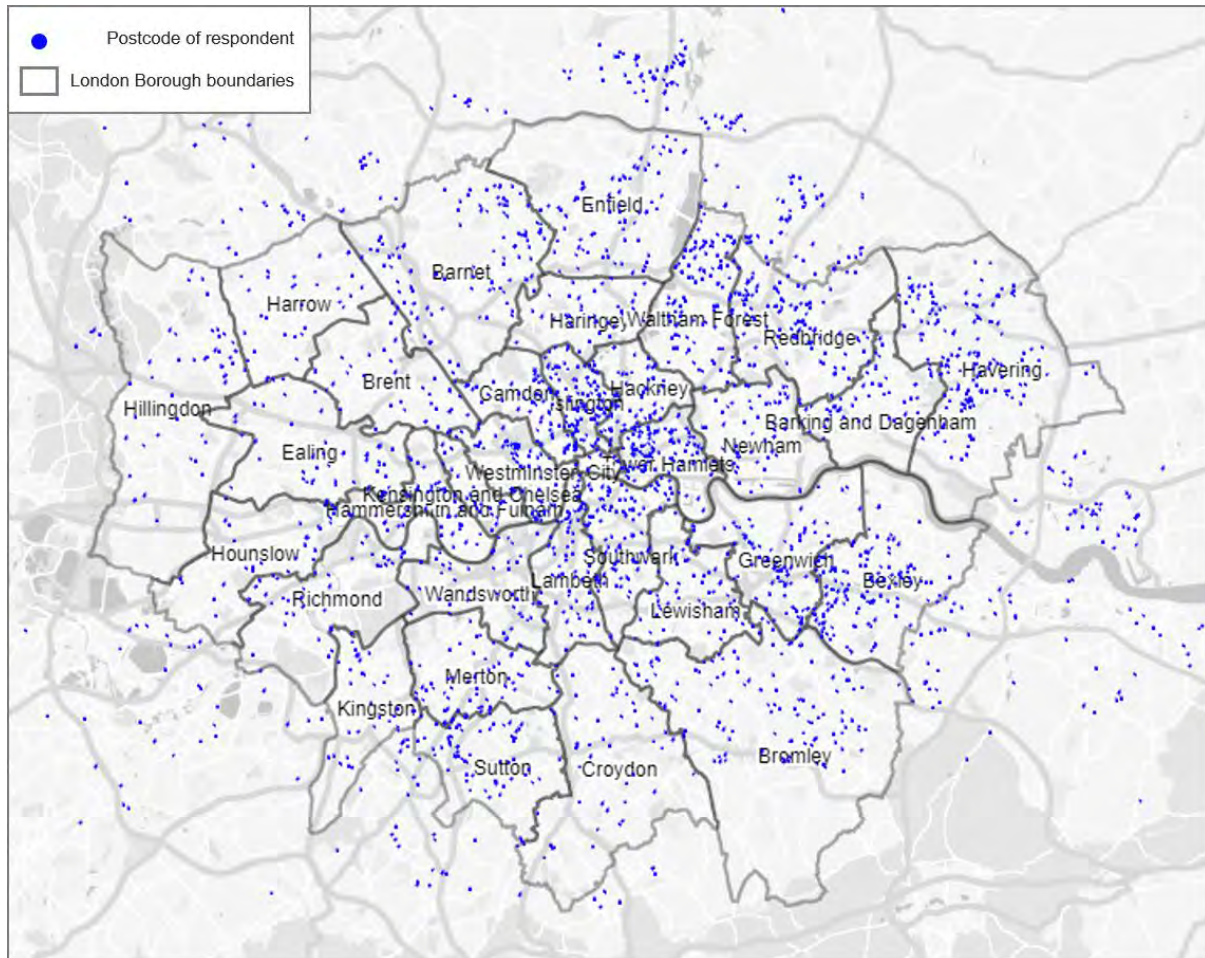
The majority heard about the consultation via social media, with an email from TfL the second most common source.

Table 6: How respondents heard	Total	
	Count	%
Received an email from TfL	2,290	45%
Received a letter from TfL	21	0%
Read about in the press	308	6%
Saw it on the TfL website	408	8%
Social media	1,394	27%
Other	217	4%
Not answered	487	10%
Total	5,125	100%

3.3 Distribution of respondents across Greater London

3,236 respondents provided their postcode. Those within Greater London, and the immediate surrounding area, are shown on the map below.

Figure 4: Distribution of respondents in Greater London



3.4 Demographics

The table below shows respondents' gender. 3,992 out of 5,125 answered this question, with a substantial proportion either not answering (11 per cent) or answering that they would prefer not to say (11 per cent). The majority of respondents were male.

Table 7: Gender	Total	
	Count	%
Male	3,398	66%
Female	514	10%
Gender Neutral	42	1%

Trans Male	20	0%
Trans Female	18	0%
Prefer not to say	578	11%
Not answered	555	11%
Total	5,125	100%

The table below shows the age profile among all respondents.

Table 8: Age	Total	
	Count	%
Under 15	6	0%
16-20	18	0%
21-25	67	1%
26-30	195	4%
31-35	283	6%
36-40	383	7%
41-45	433	8%
46-50	580	11%
51-55	674	13%
56-60	569	11%
61-70	334	7%
71+	163	3%
Prefer not to say	110	2%
Not answered	732	14%
Total	5,125	100%

The age profile for those in the taxi trade was similar, although respondents who were a member of the taxi trade were slightly more likely to be aged 46 or over than those responding who were not part of the taxi trade.

Ethnicity, sexual orientation and religious faith are shown below.

Table 9: Ethnicity	Total	
	Count	%
Asian or Asian British – Bangladeshi	109	2%
Asian or Asian British – Chinese	11	0%

Asian or Asian British – Indian	47	1%
Asian or Asian British – Other	44	1%
Asian or Asian British – Pakistani	81	2%
Black or Black British – African	72	1%
Black or Black British – Caribbean	46	1%
Black or Black British – Other	20	0%
Mixed – Other	65	1%
Mixed – White and Asian	36	1%
Mixed – White and Black African	8	0%
Mixed – White and Caribbean	27	1%
Other Ethnic Group	31	1%
Other Ethnic Group – Arab	19	0%
Other Ethnic Group – Kurdish	6	0%
Other Ethnic Group – Latin American	4	0%
Other Ethnic Group – Turkish	15	0%
White – British	2,342	46%
White – Irish	139	3%
White – Other	364	7%
Prefer not to say	1,025	20%
Not answered	614	12%
Total	5,125	100%

Table 10: Sexual orientation	Total	
	Count	%
Heterosexual	2,810	55%
Gay man	73	1%
Lesbian	83	2%
Bisexual	37	1%
Other	69	1%
Prefer not to say	1,350	26%
Not answered	703	14%
Total	5,125	100%

Table 11: Religious Faith	Total	
	Count	%
Christian	51	1%
Muslim	1,410	28%
Jewish	17	0%
Hindu	319	6%
Buddhist	17	0%
Sikh	99	2%
Other	95	2%
No religion	1,103	22%
Prefer not to say	1,357	26%
Not answered	657	13%
Total	5,125	100%

Table 12: Health problem or disability/ day-to-day limitations	Total	
	Count	%
Yes, limited a lot	123	2%
Yes, limited a little	241	5%
No	3,299	64%
Prefer not to say	852	17%
Not answered	610	12%
Total	5,125	100%

Those who have a health problem or disability were more likely to be answering as a member of the public (i.e. not a member of the taxi trade).

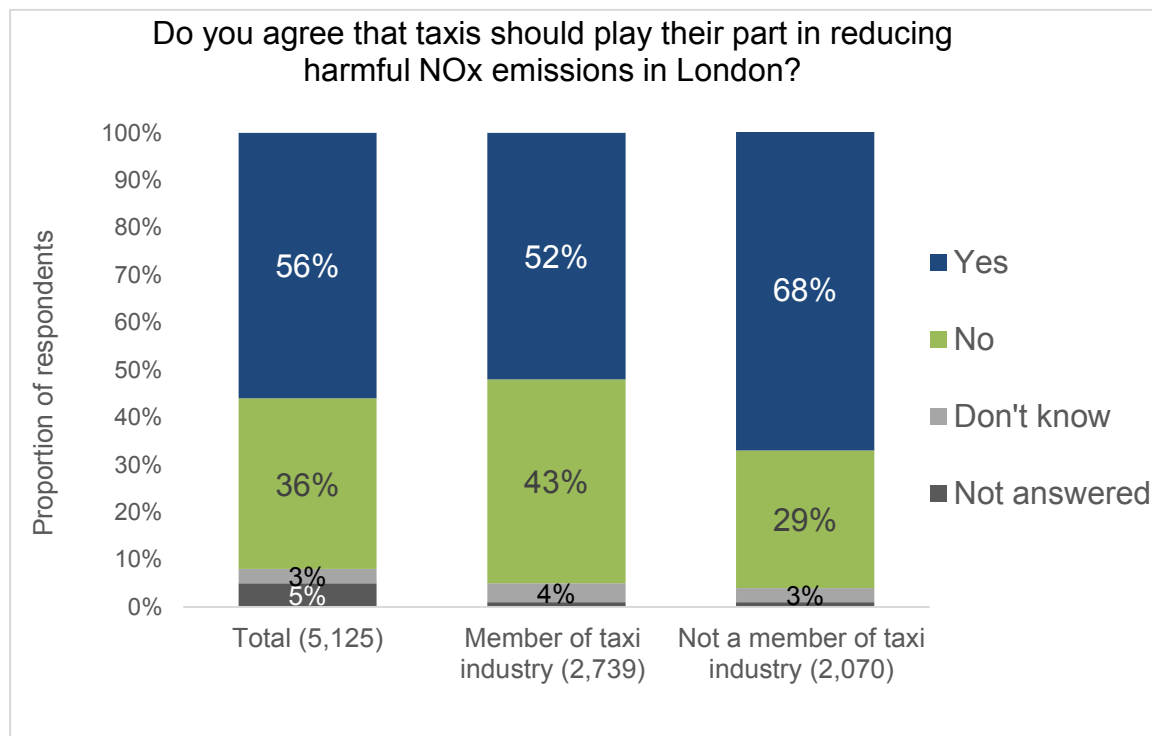
4. Summary of all consultation responses

4.1 Agreement or disagreement with proposals

4.1.1 Question 1: Agreement that taxis should play their part in reducing harmful NOx emissions in London

We asked respondents to tell us their view on whether taxis should play their part in reducing harmful NOx emissions in London. Figure 5 shows responses for all respondents, for those in the taxi trade (All London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Figure 5: Agreement that taxis should play their part in reducing harmful NOx emissions in London

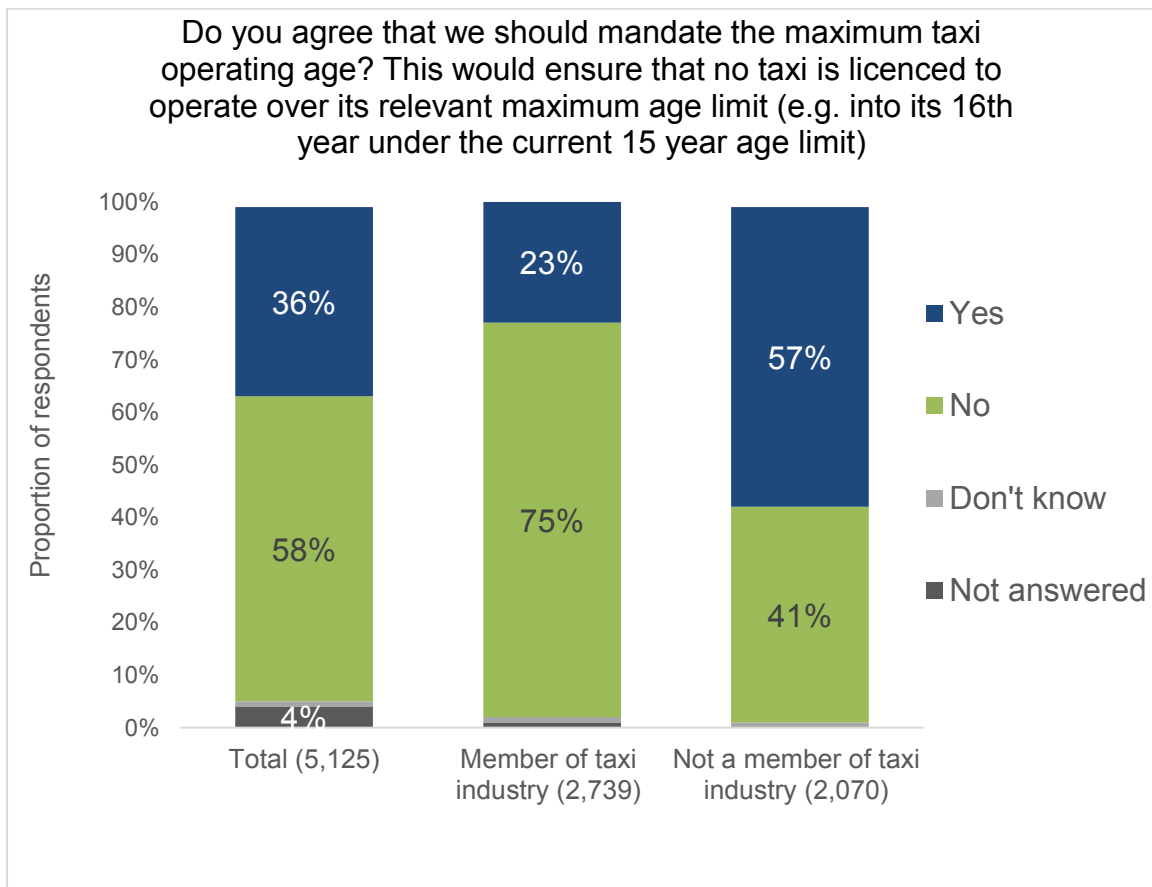


At the total level, 56 per cent agreed that taxis should play their part in reducing harmful NOx emissions in London. Half (52 per cent) of members of the taxi trade (including taxi drivers and owners) agreed. Agreement was higher among those not involved in the taxi trade at 68 per cent.

4.1.2 Question 2: Agreement with mandating the maximum taxi operating age

We asked respondents to tell us their view on whether the maximum taxi operating age should be mandated to ensure that no taxi is licenced to operate over its relevant maximum age limit (e.g. into its 16th year under the current 15 year age limit). Figure 6 shows responses for all respondents, for those in the taxi trade (All London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Figure 6: Agreement with mandating the maximum taxi operating age



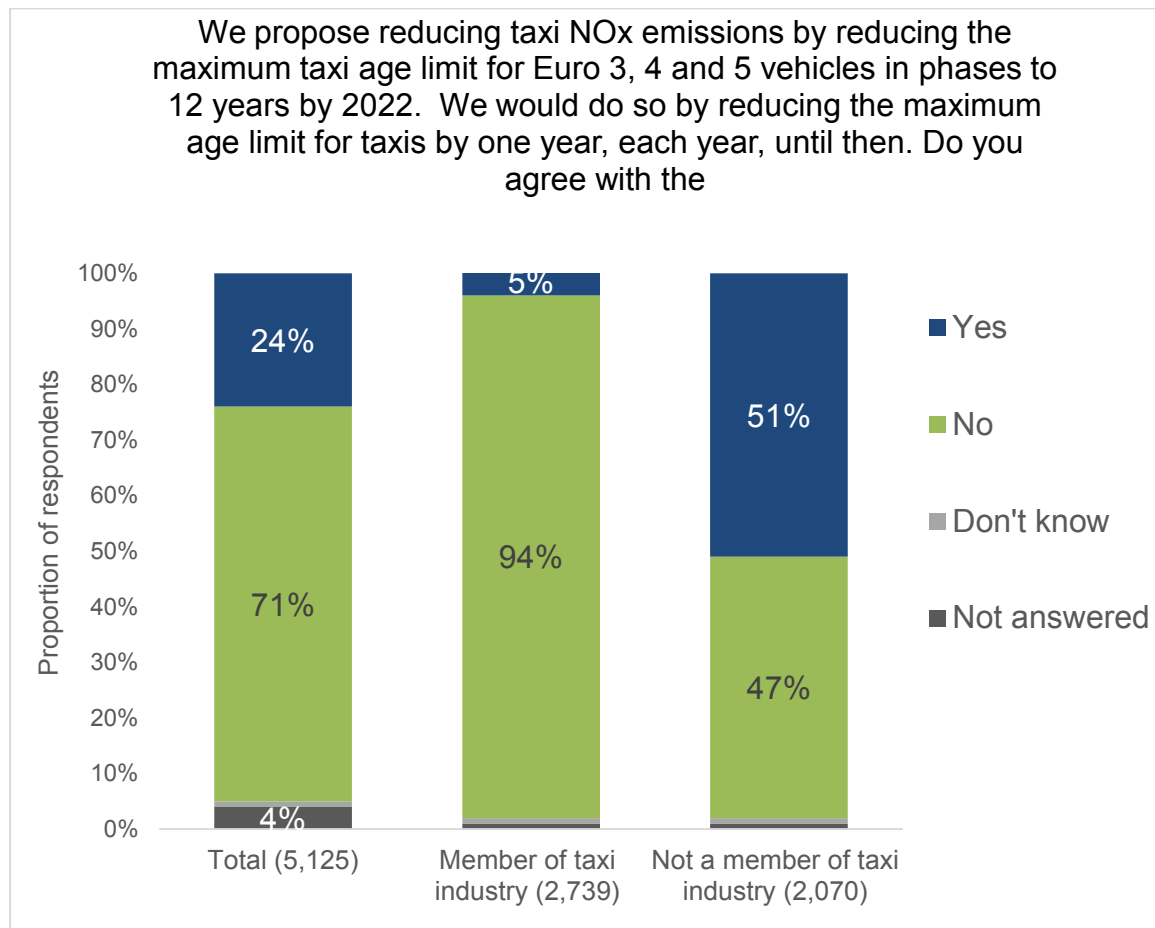
At a total level, just over a third (36 per cent) agreed that the maximum taxi operating age should be mandated. Agreement was lower among members of the taxi trade (23 per cent) and higher among those not associated with the taxi trade (57 per cent).

4.1.2 Question 3: Agreement with proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022

We asked respondents to tell us their view on the proposals for reducing taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022.

Figure 7 shows responses for all respondents, for those in the taxi trade (All London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Figure 7: Agreement with proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022



Agreement with the proposals to reduce taxi NOx emissions by reducing the taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022 was very low among members of the taxi trade (five per cent). Agreement was higher among those not associated with the taxi trade, with 51 per cent saying 'Yes'. The total level of agreement among all respondents was 24 per cent.

4.1.3 Question 3: Suggestions of other ways to reduce NOx emissions from taxis by 65 per cent by 2025

We asked respondents if they had any suggestions for other ways to reduce NOx emissions from taxis by 65 per cent by 2025. Results for this question are separated into suggestions and comments among those who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles (those who agreed with the proposals at Question 3), and those who disagreed. Responses are shown for those in the taxi trade (all London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade. Response themes have been grouped into suggestions for the taxi trade, suggestions for other transport types and other miscellaneous comments.

The full list of points raised is shown in Appendix A.

Suggestions and comments among those who *agreed* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

Table 13: Top 5 codes mentioned – Those in the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	81	
Offer assistance/grants/subsidy for taxi (ZEC/LPG/electric/diesel)	14	17%
Believe emission will be reduced	10	12%
Reduce/ ban PHVs	7	9%
Taxis contribute to pollution/air quality problems	7	9%
Stop closing roads/ Open up closed roads	6	7%

Only a small proportion of those in the taxi trade agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit. Therefore, the following results are based on the 81 taxi trade respondents who agreed and answered this open question.

Among members of the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit, the most frequent suggestions relating to the taxi trade were regarding economic factors. Members of the trade

suggested that assistance, grants or subsidies should be provided for taxis (17 per cent). There were also suggestions to reduce the cost of taxis (five per cent).

Suggestions around the maximum age limit for those in the taxi trade included reducing the age limit of taxis to 10 years, equal to the current limit for PHVs (five per cent), reducing the age limit to an unspecified number of years (five per cent), and reducing the age limit sooner than proposed (four per cent).

Five per cent of those in the taxi trade suggested that there needs to be more choice of taxis.

Members of the taxi trade also had suggestions for reducing emissions from other modes of transport. The most common suggestion was to reduce the number of, or ban, PHVs (nine per cent).

Another theme mentioned by those in the taxi trade was regarding electric vehicle usage. Five per cent mentioned the need to increase the number of electric charging stations, and four per cent commented that there should be more electric vehicles.

Road infrastructure was also mentioned, with seven per cent suggesting that roads should not be closed and four per cent that TfL's road schemes contribute to traffic and congestion. Four per cent recommended that cycle lanes be removed.

The issue of taxis contributing to pollution and air quality issues was acknowledged by nine per cent of taxi trade members who agreed with the proposals. Four per cent also commented that buses contribute to pollution and air quality. Twelve per cent believed that emissions would be reduced as a result of the proposals, with a small proportion stating that they did not believe they would be reduced (four per cent).

Table 14: Top 5 codes mentioned – Those not in the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	668	
Taxis should pay ULEZ charge (ZEC/LPG/electric/diesel)	79	12%
Taxis contribute to pollution/air quality problems	76	11%
Believe emission will be reduced	74	11%
Stop/Eliminate taxis from idling	71	11%
Reduce age limit of taxis sooner	71	11%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	71	11%

Among those who were not members of the taxi trade, there were suggestions for taxis to pay the ULEZ charge (12 per cent) and Congestion Charge (nine per cent).

Other suggestions for the taxi trade from non-taxi trade respondents were to offer assistance, grants or subsidies should be provided for taxis (11 per cent).

Non-taxi trade respondents had similar suggestions around the maximum age limit to those in the taxi trade, including: reducing the age limit of taxis to 10 years, equal to the current limit for PHVs (seven per cent) and reducing the age limit to an unspecified number of years (five per cent). Non-taxi trade respondents were more likely to call for the age limit to be brought in sooner than proposed (11 per cent compared with four per cent of those in the taxi trade). Four per cent suggested banning all taxis from London.

Additional suggestions from non-taxi trade respondents regarding the taxi trade were to stop taxis from idling (11 per cent), reduce the amount of taxis (eight per cent) and that all taxis should be electric (eight per cent).

The issue of taxis contributing to pollution and air quality issues was acknowledged by 11 per cent of non-taxi trade members.

Suggestions and comments among those who *disagreed* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

Table 15: Top 5 codes mentioned – Those in the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	1,499	
Reduce/ban PHVs	223	15%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	209	14%
Unfair to change goalposts/maximum age limit	173	12%
This would create hardships for taxi drivers	144	10%
Stop closing roads/Open up closed roads	142	9%

Among members of the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit, there was a higher amount of suggestion that assistance, grants or subsidies should be provided for taxis (14 per cent). Nine per cent suggested that the cost of purchasing a taxi should be

reduced with seven per cent suggesting that there should be more choice of taxis to purchase.

There were concerns from the taxi trade that the proposals would create hardships for taxi drivers (10 per cent). Some stated that it is unfair to change the goalposts regarding the maximum age limit (12 per cent), with nine per cent stating that the proposals were biased or unfair against the taxi trade.

Suggestions about the maximum age limit among taxi trade respondents who disagreed with the proposals included allowing natural wastage of the taxi fleet (eight per cent) and keeping the maximum age limit at 15 years (seven per cent).

Among members of the taxi trade who disagreed with the proposals, there were also suggestions regarding other modes of transport. Reducing the number of, or banning, PHVs was mentioned by 15 per cent and seven per cent mentioned reducing the number of empty buses.

Road infrastructure was also mentioned, with nine per cent suggesting that roads should not be closed or closed roads should be opened, and a further nine per cent that cycle lanes should be removed. Six per cent mentioned the need for additional electric charging stations.

Although these members of the taxi trade did not agree with the proposals, they were no more likely to think that emissions would not be successfully reduced (five per cent compared to four per cent of those who did agree with the proposals). However, six per cent did call for more figures to back up the rationale for the proposals.

Table 16: Top 5 codes mentioned – Those not in the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	463	
Reduce/ban PHVs	57	12%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	54	12%
Biased/unfair/targets taxis/puts pressure on taxi trade	47	10%
Buses contribute to pollution/air quality problems/more than taxis	35	8%
Reduce/ban buses/empty buses	34	7%

Among non-taxi trade respondents who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit, there were again suggestions of assistance, grants or subsidies for taxis (12 per cent), with five per cent suggesting that the cost of purchasing a taxi should be reduced and a further five per cent suggesting that there needs to be more choice of taxis to purchase.

Ten per cent who were not part of the taxi trade but disagreed with the proposals thought that the proposals were biased against the taxi trade, with five per cent stating that these proposals would create hardships for drivers. As for those in the taxi trade, there were suggestions to reduce other forms of transport in order to reduce NOx emissions, including reducing or banning PHVs (12 per cent) and reducing the number of empty buses (seven per cent). Eight per cent said that buses contribute to pollution and air quality problems more than taxis.

The need for more electric charging stations was also noted by non-taxi trade respondents (seven per cent), with six per cent mentioning removing cycle lanes and five per cent requesting the end of road closures.

4.1.4 Question 4: Views about whether it is right for Euro 6, LPG and ZEC taxis to have a 15 year age limit

We asked respondents if they agreed that it is right to allow Euro 6, LPG and ZEC taxis to have a 15 year age limit and whether they had any suggestions for other ways to recognise the differing levels of emissions from taxis. Results for this question are separated into suggestions and comments among those who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles (those who agreed with the proposals at Question 3), and those who disagreed. Responses are shown for those in the taxi trade (all London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

The full list of codes for all respondents is shown in Appendix A.

Suggestions and comments among those who *agreed* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

Table 17: Top 5 codes mentioned – Those in the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	75	

Should remain 15 years	11	15%
Should be no age limit (ZEC/LPG/electric)	9	12%
Taxis are too expensive to have a maximum age limit (ZEC/LPG/electric)	9	12%
Taxis are less polluting than other vehicles (ZEC/LPG/electric)	9	12%
Should be 10 years	8	11%

Only a small proportion of those in the taxi trade agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit. Therefore, the following results are based on the 81 taxi trade respondents who agreed and answered this open question.

Among members of the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit, there were not many suggestions for alternative ways to recognise the differing levels of emissions from taxis. Some thought that the maximum age limit should remain at 15 years (15 per cent). However, 11 per cent stated that the age limit should be reduced to 10 years. Seven per cent agreed that it should remain at 15 years.

12 per cent of those in the taxi trade who agreed with the proposals mentioned that there should be no maximum age limit, with 12 per cent commenting that taxis are too expensive to have a maximum age limit.

A further 12 per cent of those in the taxi trade mentioned that taxis are less polluting than other vehicles.

Table 18: Top 5 codes mentioned – Those not in the taxi trade who agreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	524	
All taxis should have a lower age limit (10/12 years)	73	14%
Should be 10 years	59	11%
Need more alternative fuel source vehicle usage (electric/hybrid/LPG)	57	11%
Taxis pollute/are more polluting than other vehicles (ZEC/LPG/electric)	49	9%
Agree with proposal	46	9%

Of those non-members of the taxi trade who agreed with the proposals, 14 per cent stated that all taxis should have a lower age limit, including Euro 6, LPG and ZEC taxis. 11 per cent thought that the limit should be 10 years for Euro 6, LPG and ZEC taxis, and seven per cent thought the limit should be the same as for PHVs.

A suggestion for other ways to recognise differing levels of emissions from taxis was to enforce testing to assess emission levels (five per cent of non-taxi trade respondents).

There were other suggestions of alternative ways to recognise differing emission levels, mentioned by small proportions of respondents from outside the taxi trade: charging taxis according to emission levels (two per cent), allowing retrofitting/modifications to taxis (one per cent) and having no age limit for taxis that pass required tests (less than one per cent).

Suggestions and comments among those who *disagreed* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

Table 19: Top 5 codes mentioned – Those in the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	1,681	
Should be no age limit (ZEC/LPG/electric)	693	41%
Should remain 15 years	290	17%
Taxis are too expensive to have a maximum age limit (ZEC/LPG/electric)	238	14%
Taxis are less polluting than other vehicles (ZEC/LPG/electric)	157	9%
Unfair to change goalposts/maximum age limit	136	8%

Among members of the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit, the most frequent response regarding the proposal of a 15 year limit for Euro 6, LPG and ZEC taxis, was that these vehicles should not have a maximum age limit (41 per cent of those in the taxi trade who disagreed with the proposals). Five per cent stated that there should be an age limit for these vehicles, but this should be higher at 20 years. Some (four per cent) thought that all taxis should have an extended limit. Some agreed that the limit was correct at 15 years (17 per cent).

Eight per cent of those in the taxi trade stated that it would be unfair to change the goalposts on taxi maximum age limits. Other reasons for disagreement included: taxis being too expensive to impose a maximum age limit (14 per cent) and taxis being less polluting than other types of vehicles (nine per cent).

A small proportion gave suggestions of alternative ways to recognise differing emission levels, mentioned by small proportions of respondents from outside the taxi trade: having no age limit for taxis that pass required tests (five per cent) and allowing retrofitting/ modifications to taxis (one per cent).

Table 20: Top 5 codes mentioned – Those not in the taxi trade who disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)	Total	
	Count	%
Base	662	
Should be no age limit (ZEC/LPG/electric)	265	40%
Should remain 15 years	141	21%
Taxis are too expensive to have a maximum age limit (ZEC/LPG/electric)	68	10%
Taxis are less polluting than other vehicles (ZEC/LPG/electric)	57	9%
Unfair to change goalposts/maximum age limit	44	7%

For non-taxi trade members who disagreed with the proposals, a large number also stated that there should be no age limit for Euro 6, LPG and ZEC taxis (40 per cent). Some agreed that this limit should stay at 15 years (21 per cent). The expense of taxis was also acknowledged, with 10 per cent of non-taxi trade respondents answering that taxis are too expensive to have a maximum age limit. Nine per cent also mentioned taxis being less polluting than other vehicles.

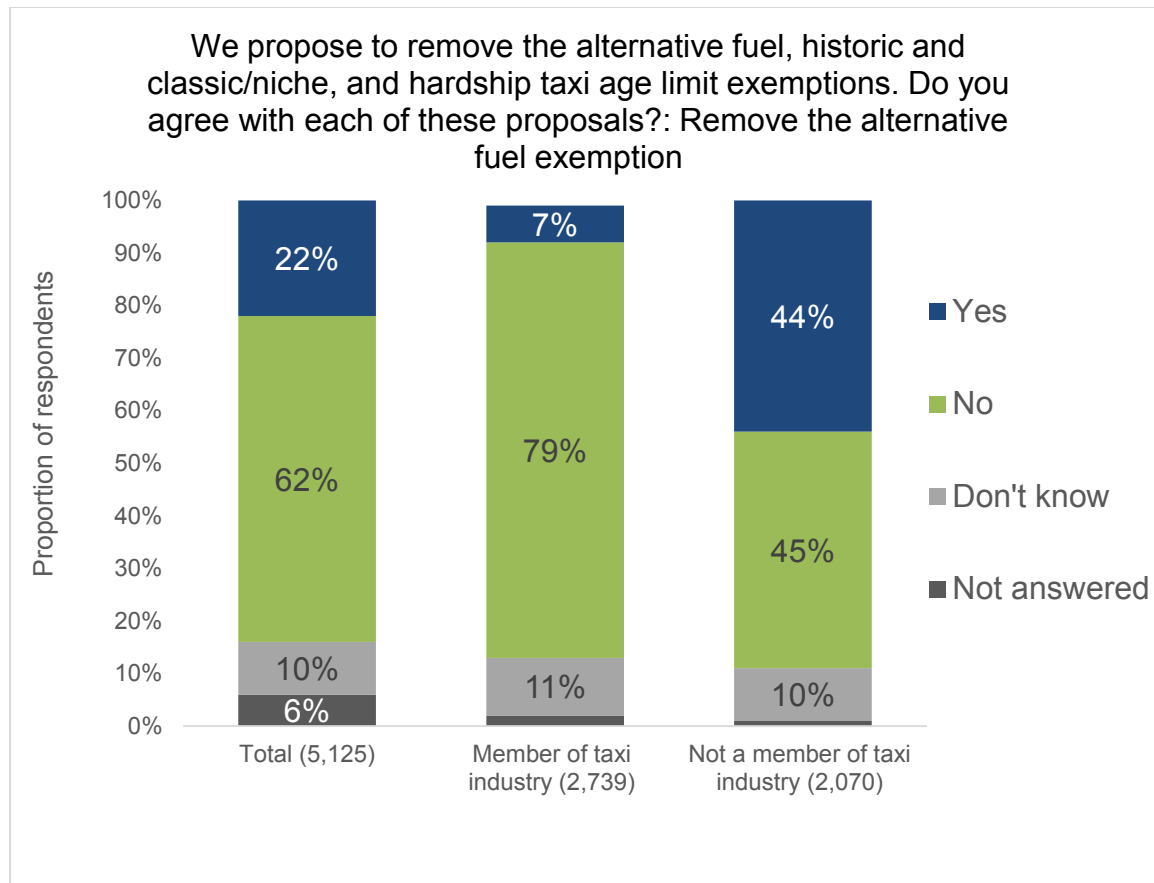
Again, non-taxi trade members suggested having no age limit for taxis that pass required tests (five per cent) and allowing retrofitting/ modifications to taxis (one per cent).

4.1.5 Question 5: Agreement with proposals to remove taxi age limit exemptions

We asked respondents to tell us whether they agreed with proposals to remove the alternative fuel exemption, historic and classic/niche exemption and hardship exemption. Figure 8 shows responses for all respondents, for those in the taxi trade

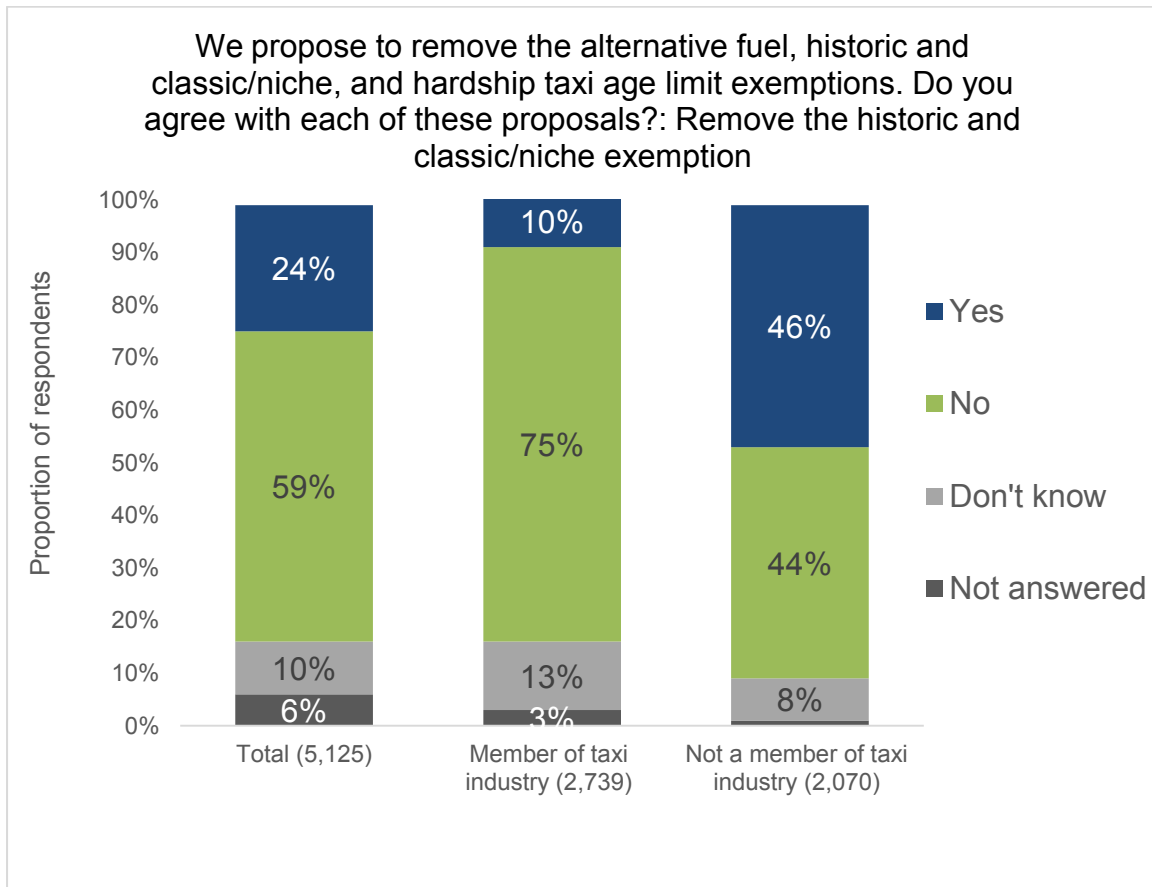
(all London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Figure 8: Agreement with proposal to removal taxi age limit exemption: Alternative fuel exemption



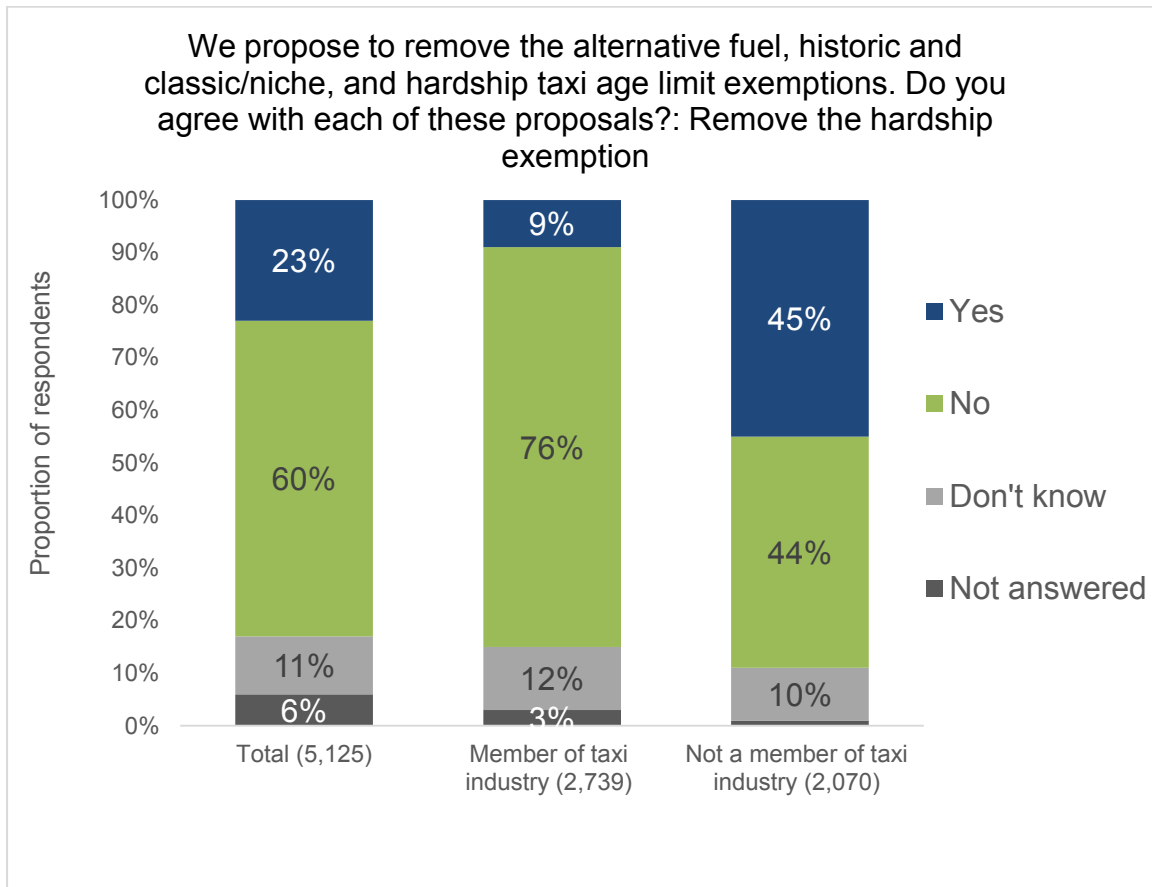
Overall, 22 per cent of respondents agreed that the alternative fuel exemption should be removed. Agreement was lower among those in the taxi trade (seven per cent) and higher among non-members of the taxi trade (44 per cent).

Figure 9: Agreement with proposal to removal taxi age limit exemption: Historic and classic/niche exemption



Overall, a quarter of respondents (24 per cent) agreed that the historic and classic/niche car exemption should be removed. Agreement was lower among members of the taxi trade (10 per cent) and higher among non-members of the taxi trade (46 per cent).

Figure 10: Agreement with proposal to removal tax age limit exemption: Hardship exemption



Almost a quarter of respondents (23 per cent) also agreed that the hardship exemption should be removed. Agreement was lower among members of the taxi trade (nine per cent) and higher among non-members of the taxi trade (45 per cent).

4.1.6 Question 5: Additional impacts that should be borne in mind with regard to exemption removals

We asked respondents to tell us if they anticipated any additional impacts that should be borne in mind in these proposals. Respondents were also asked to suggest any ideas they had about how to mitigate these impacts.

Responses are shown for those in the taxi trade (all London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Due to low numbers of respondents who agreed with the proposals answering this question, it is not possible to separate results for this question by those who agreed/disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles (Question 3).

The full list of points raised is shown, by all respondents, in Appendix A.

Table 21: Top 5 codes mentioned – Those in the taxi trade	Total	
	Count	%
Base	1,216	
Will impact people nearing retirement/force early retirement	425	35%
Will create financial hardships	143	12%
Taxis are too expensive to buy/rent (ZEC/LPG/electric)	126	10%
Will create hardship for part time/less mileage drivers	109	9%
Unfair to change goalposts/age limit	97	8%

Among those working in the taxi trade, the key additional impacts highlighted related to hardships for those in the taxi trade. These hardships included the impact on drivers who are near retirement, or the proposals forcing early retirement (35 per cent), hardships for part time drivers or drivers with lower mileage (nine per cent). A smaller proportion suggested that this could hurt or kill off the taxi trade (five per cent) and that it would result in job loss and higher unemployment (four per cent).

Economic impacts were highlighted, with 12 per cent of those in the taxi trade per cent highlighting that it could cause financial hardships for those in the taxi trade. Ten per cent mentioned that taxis are too expensive to buy or rent and five per cent were concerned about the impact these proposals could have on taxi value or resale value. Five per cent suggested that financial impacts could be mitigated through assistance, grants or subsidies for taxis.

Six per cent of taxi trade respondents stated that the proposals target and put pressure on the taxi trade with eight per cent stating that it is unfair to change the goalposts with regards to age limits.

Of those respondents who were not part of the taxi trade, 17 per cent who responded to this question thought that there would not be any additional impacts.

A quarter of non-taxi trade respondents thought that the proposals would cause a hardship on those nearing retirement (26 per cent) and for part time drivers (12 per cent), with five per cent mentioning more general financial hardships.

As for those in the taxi trade, some non-taxi trade respondents stated that the proposals target and put pressure on the taxi trade (six per cent).

4.1.7 Question 6: Comments on Integrated Impact Assessment

We asked respondents to tell us if they had comments on the Integrated Impact Assessment including any additional impacts or other groups that may be affected by the proposals. Respondents were also asked to suggest any ideas they had about how to mitigate these impacts.

Responses are shown for those in the taxi trade (all London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Due to low numbers of respondents who agreed with the proposals answering this question, it is not possible to separate results for this question by those who agreed/disagreed with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles (Question 3).

The full list of points raised is shown, by all respondents, in Appendix A.

Most comments were general rather than specifically referring to elements of the Integrated Impact Assessment.

Table 23: Top 5 codes mentioned – Those in the taxi trade	Total	
	Count	%
Base	1,543	
Upgrade to Euro 6/conversions available/retrofit/exhaust (Euro 3,4,5 taxis)	512	33%
Unfair to change goalposts/maximum age limit	204	13%
Will create financial hardship (drivers/owners/trade)	178	12%
Will create hardship (drivers/owners/trade)	138	9%
Taxis are too expensive (ZEC/LPG/electric)	118	8%

Comments from the taxi trade were most commonly around conversion to Euro 6. A third (33 per cent) mentioned the possibility of converting older taxis (particularly Euro 5) vehicles to Euro 6.

Some mentioned that it is unfair to change the goalposts regarding the maximum age limit (13 per cent). It was reiterated that there would be potential hardships financially (12 per cent), for those in the taxi trade generally (nine per cent) and for those nearing retirement (five per cent).

Eight per cent mentioned that taxis are too expensive to buy or rent and seven per cent were concerned about the impact these proposals could have on taxi value or resale value.

Some taxi trade respondents stated that the proposals target and put pressure on the taxi trade (six per cent).

Table 24: Top 5 codes mentioned – Those not in the taxi trade	Total	
	Count	%
Base	775	
Upgrade to Euro 6/conversions available/retrofit/exhaust (Euro 3,4,5 taxis)	260	34%
Should remain at 15 years/not be changed at all	76	10%
Agree with proposal/Good to implement	64	8%
Taxis/black cabs contribute to pollution/air quality problems	48	6%
Disagree with proposal/Bad to implement	6%	6%

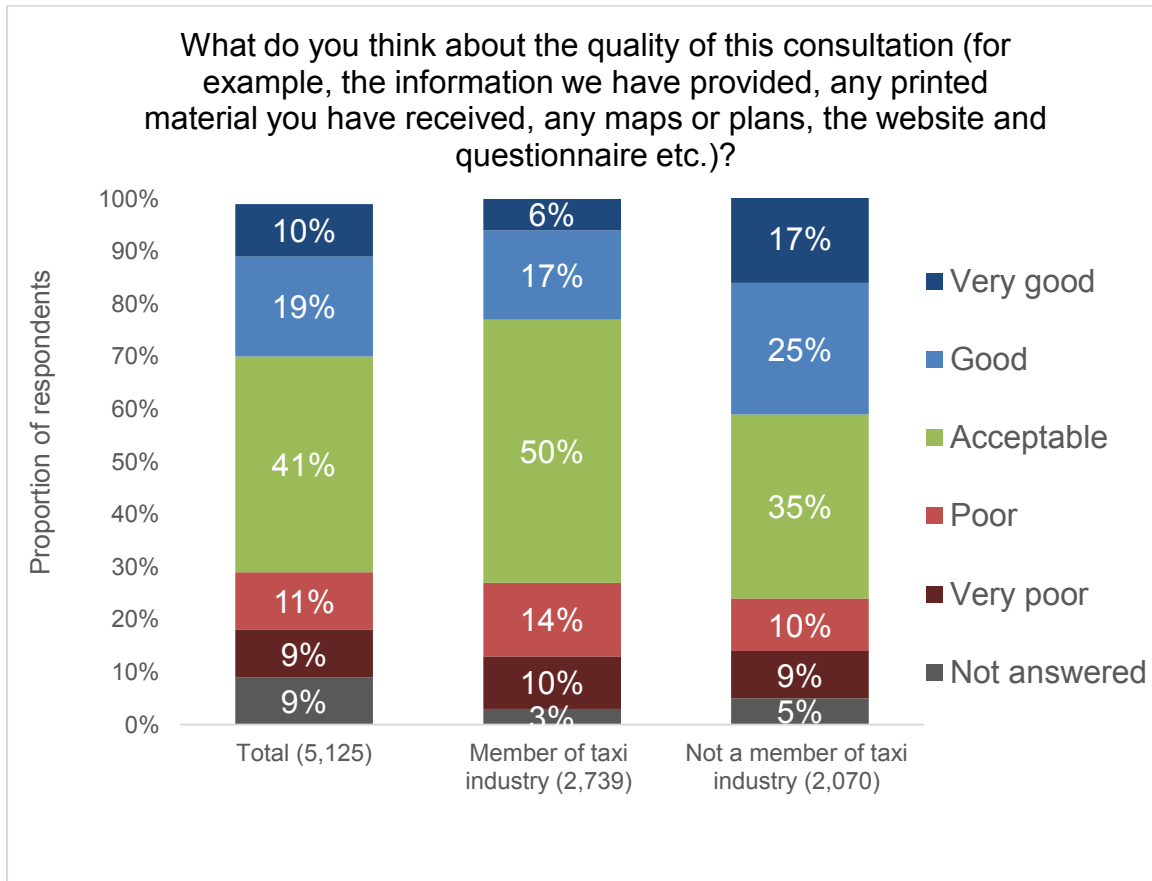
Non-taxi trade respondents were more likely than those in the taxi trade to respond to this open question that they agree with the proposals (10 per cent). However, other responses were similar to those for the taxi trade with 34 per cent mentioning the potential for upgrade of vehicles to Euro 6 standard.

4.2 Quality of Consultation

4.2.1 Question 16: Quality of Consultation

We asked respondents to rate the quality of this consultation.

Figure 11: Assessment of the quality of this consultation



In total, 70 per cent rated the quality of the consultation as being acceptable or better. Ten per cent rated it as being very good, 19 per cent as good and a further 41 per cent as acceptable. Members of the taxi trade rated the quality of the consultation lower than non-members, with six per cent saying it was very good compared with 17 per cent of non-members. However, taxi trade members were no more likely to rate the consultation as very poor.

4.3 Stakeholder summaries

We received 49 stakeholder replies to the consultation, these replies have been summarised for this report.

Table 1 below provides a brief summary of the view expressed in the stakeholder summary.

Stakeholder	Taxis should play a part in reducing emissions	Mandate maximum taxi operating age	Phased reduction of age limits
Local authorities and Assembly Members			
Brentford council	Yes	Yes	Yes
LB Ealing	Yes	Yes	Yes
Three Rivers District council	Yes	Yes	Yes
LB Lewisham	Yes	<i>Not referenced</i>	Yes
LB Hammersmith and Fulham	Yes	Yes	Yes
Southwark Council	Yes	Yes	Yes
LB Lambeth	Yes	Yes	Yes
LB Camden	Yes	Yes	Yes
Westminster City Council	Yes	Yes	Yes
City of London Corporation	Yes	<i>Not referenced</i>	Tackle highest emitters
Kingston and Sutton Shared Environment Service	Yes	Yes	Yes
Caroline Pidgeon MBE	Yes	<i>Not referenced</i>	Yes
UK100	Yes	Yes	Yes
Regulatory services partnership	Yes	Yes	Yes
Transport industry			
LEVC	Yes	Yes	Yes
The International Council on Clean Transportation	Yes	Yes	Yes
Autogas	Yes	Yes	Yes
Gastech LPG London Taxi Technology	<i>Not referenced</i>	<i>Not referenced</i>	Should be retained for LPG
Campaign Groups			

Southwark cyclists	Yes	Yes	Yes
London Living Streets	Yes	Yes	Yes
Make Air Safe Clean	Yes	Yes	Yes
Haringey Living Streets	Yes	Yes	Yes
20s plenty for us	Yes	Yes	Yes
Enfield Cycle Campaign	Yes	Yes	Yes
Clean Air in London	Yes	<i>Re-consult based on their alternative proposals</i>	
London Cycling Campaign	Yes	<i>Not referenced</i>	Yes
Bloomsbury Air	Yes	Yes	Yes
Sustrans	Yes	Yes	Yes
Camden Civic Society's Air Quality, Green Open Spaces and Trees group	Yes	Yes	Yes
Clean Air Brent	Yes	Yes	Yes
West Hampstead Amenity transport	Yes	Yes	Yes
Other			
NW3 Green School Runs	Yes	Yes	Yes
Knightsbridge Residents Management Company	Yes	Yes	Yes
Netley Primary School Air Quality Leader	Yes	Yes	Yes

Love Wimbledon BID	Yes	Yes	Yes
New West End Company	Welcome regulation	<i>Not referenced</i>	Modest, realistic and timely
Public Health England	Yes	Yes	Yes
Association of Directors of Public Health for London	Yes	Yes	Yes
Trade Unions/ Associations			
LTDA	Yes	No	No
United Cabbies Group	Yes	No	No
Unite the Union	Yes	Yes (at 16 th year)	No
London suburban taxi coalition	Yes	Yes	No
RMT	Yes	No	No
GMB Union	Yes	No	No
London Motor Cab Proprietors Association	<i>Not referenced</i>	No	No
Wider taxi and private hire stakeholders			
Cabvision Ltd	Yes	Yes	No
City of Salford PHV association	Yes	Yes	Yes
My Taxi	Yes	Yes	Yes
United Private Hire Drivers	Yes	Yes	Yes

Stakeholder summaries to taxi age limit consultation

20's Plenty for Us

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with our proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

They consider it is entirely appropriate that taxis should play a full part in reducing harmful NOx and particulate emissions in London as they currently have a high level of harmful emissions in proportion to the numbers of journeys that they facilitate. As a result they contribute significantly to the poor air quality in the capital. They consider it important to underline TfL's legal obligation to act and note that every sector has to take its cut.

They consider this is a more than proportionate response by TfL and further action should be considered in conjunction with this work on age limits in terms of a) removing Congestion Charge exemptions that taxis enjoy currently and b) ensuring that taxis are not exempt from any other/future charges such as ULEZ. They state that it is also vital that they are subject to other policies that are outlined in the MTS such as Vision Zero and that as soon as possible they are fitted with safety devices such as mandatory intelligent speed assistance when they are in use on London's roads.

Autogas Ltd

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They support the Mayor of London and Transport for London's efforts to transition away from high-polluting diesel vehicles in the black cab sector which, as the consultation recognises, is fast-becoming the largest road transport source of NOx in central London.

They also consider that the licensing changes proposed by TfL and with the supporting grant schemes in place provides the most effective framework for drastically reducing NOx (and other pollutants) emitted by the taxi sector in the next five years.

They understand that the only options available to taxi drivers which are proven to effectively reduce harmful emissions are those supported under the proposed regime including LPG repowering technology. If further emission reduction technologies are developed for the London black cab market, it is vital that they are as effective as presently approved technologies in reducing NOx, PM and carbon and that there are

no unintended consequences of promoting such technologies, such as an increase in other harmful pollutants or the ability to easily commit emissions fraud.

They urge TfL to retain the current technology approval regime and ensure stringent ongoing monitoring processes are established.

They note that LPG and ZEC options are ready to be deployed in London in order to deliver the necessary reductions within the necessary timescales. They are keen to see a clear signal from TfL in support of these technologies for the immediate reduction in harmful emissions from the taxi sector.

They support the Mayor of London and Transport for London's proposals to encourage the uptake of low emission taxis, including LPG, through the taxi licensing system and supporting grant schemes. Indeed, LPG repowering technology is a proven, TfL and CVRAS approved method for drastically reducing the NOx and PM emissions of diesel black cabs, whilst also ensuring carbon emissions remain low.

They conclude by stating that there is a financial cost to drivers of black cabs in switching to cleaner alternatives. However, LPG repowering technology provides an affordable, practical and proven low emission alternative – particularly for Euro 5 drivers.

Association of Directors of Public Health for London

They state that the impact of London's transport system on these public health challenges cannot be underestimated. They consider the proposal to reduce the maximum age of taxi fleets will support key policy drivers to improve health and wellbeing of Londoners, including the Mayors Transport Strategy, Environment Strategy and Health Inequalities Strategies in improving air quality and of course ambition to adopt a Healthy Streets approach.

They agree that taxis should play their part in reducing harmful NOx Emissions in London.

They agree that we should mandate the maximum taxi operating age. They note that this will be in line with the recent implementation of the Ultra Low Emission Zone (ULEZ) and bus vehicle changes to help reduce NOx emissions.

They agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis, stating that this phase approach enables taxi owners to plan for alternative, cleaner models whilst reducing any negative impact to their livelihood. Financial support outlined in this proposal is welcomed to help with this transition for owners and organisation. However, this should also extend to support and guidance to reduce any negative emotional health and wellbeing impact associated with this transition and related to lack of affordability and subsequent unemployment or reduced earnings.

They would be open to TfL being even more stringent for older vehicles if possible, so a shorter license period for older vehicles. They suggest possibly a 10 year limit on Euro 3, 4 and 5 and then, 12 years for Euro 6 and over.

They consider reducing emissions directly related to taxis could be achieved by other, more affordable actions such as supporting individuals and organisations to retrofit options for converting existing vehicles, limiting the number of licensed taxi drivers and supporting taxi drivers to requalify into different professions by linking with a range of apprenticeship schemes in London.

They suggest further strategies can accompany these proposals;

- Increased active travel promotion more aggressively around tubes and bus stations, and TfL website more broadly to reduce the need for car transport being required in the first instance.
- Supporting borough at a locally level implementing intervention such as school audits, street closure, car idling efforts etc.
- Continuing to implementing Healthy Streets approach

They further note that TfL's data indicate that Euro 5 diesel taxis are the worst emitters, so it would be worth additional focus on the worst vehicles, rather than to only focus on age.

They agree with our proposals to remove the alternative fuel exemption and the historic and classic/niche exemption. They agree that with sufficient notice, support and other safeguards in place the hardship exemption could be lifted.

They would like TfL to continue to lobby central government and other city-leaders to adopt the Healthy Streets Approach as well as, share learning across the nation so that everyone in the UK can benefit from breathing clean air.

Bloomsbury Air

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They make the points for additional funding for taxi drivers to move to the new cleaner zero emission (capable) vehicles. That there needs to be significant progress in the numbers of rapid charging points available to taxis and other vehicles. They say that at the moment a zero emission capable taxi typically spends half its working day running from its ICE, due to the lack of rapid charging points available.

They request that good reliable information should be provided (and promoted) to Taxi drivers of the long term health and cost benefits of switching to zero emission electric vehicles. They state that they are significantly cheaper to run with a relatively short payback period for the increased capital cost.

They also make the following points; It is close to (if not actually) criminally negligent that London Taxis have been powered by diesel for so long. Taxis in other major global cities have been using LPG or Hybrid vehicles for decades (Sydney for example) London is significantly behind for a major global city. This may be because of slow moving regulation and little or no competition in the marketplace for the purchase of London Taxis. Both reasons are the result of failures in the system and

a generally negligent attitude to air pollution. PM and NOx are carcinogenic and respirable.

They further note that taxis do not have stop/start technology. There are therefore some 20,000 plus vehicles regularly entering central London which spend 30% of their time stationary but emitting polluting fumes.

They recommend that all Euro 4, 5 and 6 taxis should be retro fitted with more fuel efficient technology. Earlier more polluting engine models could be retro fitted with more efficient lower emission Euro 6 engines in the meantime. However this should not extend their lifespan nor slow the uptake of zero emission taxis, and should be on top of more stringent taxi lifespans.

They recommend that all Taxis should be subject to real world (London driving) emissions tests and have regular maintenance checks to ensure they are optimised in terms of performance and serviced accordingly.

They agree with proposals to remove the alternative fuel exemption and the historic and classic/niche exemption.

They suggest that financial support to be given to taxi drivers to switch vehicles will be required, and should be forthcoming. But also, a strong and a powerful campaign to educate drivers of the significant benefits of moving over to zero emission vehicles a) from their own health perspective and b) from the public health perspective.

They also suggested that further action should be considered in conjunction with the work on age limits to remove the Congestion Charge and ULEZ exemptions for taxis and that taxis should be subject to other policies in the MTS (e.g. Vision Zero).

Brentford Community Council

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They suggest an increase subsidy to convert to electric vehicles.

They agree with our proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

Cabvision Capital Limited

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. However they do not agree with they phased approached to reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles.

They understand the logic of removing the older vehicles Euro 3 and Euro 4 but consider that removing Euro 5 could have devastating effects on the taxi trade as some of these vehicles are just three years old.

They suggest that Euro 5 Vito is probably cleaner than hybrid TXe and it would be totally illogical for a clean air plan to reduce the age limit on these 'clean' fuel vehicles.

They agree with our proposals to remove the alternative fuel exemption and the historic and classic/niche exemption. They suggest that TfL should have the ability to assess exemptions on a case by case basis but that automatic exemptions should not remain in place as these are open to manipulation.

They suggest that the staged scale back at 2020, 2021 and 2022 is a more sensible proposal and reducing in one tranche would have devastating consequences and shrink the taxi fleet to an unsustainable level.

Caroline Pidgeon MBE AM

Welcomes this consultation and broadly support its aims. Also, welcomes the recent policy U-turn from the Mayor to provide financial assistance for owners of Euro 5 taxis to convert their vehicles to Liquid Petroleum Gas (LPG).

There is a request regarding the 50 LPG stations and if the number is sufficient. The number should be kept under close review alongside take-up of the conversion grants and the overall numbers of LPG taxis.

It is stated that it is essential that the number of rapid charging points in London, particularly those dedicated for use by taxis, matches the demand. Further welcomes the work of the Electric Vehicle Infrastructure Taskforce and looks forward to the publication of the shared delivery plan in the near future.

The idea of a phased reduction is supported but there is concern that the rate at which this affects taxi drivers could be faster than it seems to be. Each year two 'classes' or age groups of taxis will become un-licensable. This is because each year the age limit would reduce by one year and all taxis get a year older.

The recent revision to the taxi delicensing scheme is welcomed. The increased funding should help more drivers to make the switch to ZEC models or other cleaner vehicles. Careful consideration needs to be made of whether the payments have been set at the right level. The impact of the revised scheme should be monitored closely along with the impact on taxi drivers. The lack of alternative ZEC taxis is mentioned and that it is important that TfL encourages a range of options.

In regards to the Hardship exemption the consultation's accompanying 'Information and Integrated Impact Assessment' creates confusion by stating 'exemptions and/or extensions to the current applicable age limit will only be granted in exceptional circumstances, where it is considered reasonable to do so'. This means the consultation is unclear how the proposed changes would be different to the current set up in this regard. If TfL goes ahead with removing this exemption, it must clarify

this point, giving particular attention to what kinds of 'exceptional circumstances' might qualify.

It is requested TfL clarify the rationale to holding the private hire industry to what appears to be a lower environmental standard.

City of London Corporation

They state that unfortunately considering the data that was produced as part of the consultation, this data shows that that tackling the oldest vehicles first will have less impact than tackling those vehicles with the greatest emissions. Euro 5 vehicles have higher emissions than both Euro 3 and Euro 4 vehicles (Euro 2 vehicles are over 15 years old and will no longer be licensed). Therefore, the LPG fund to support the conversion of Euro 5 taxis to reduce emissions from these vehicles is a useful additional measure as these vehicles appear to be the worst emitters of NOx and currently no Euro 5 taxis are due to leave the fleet until 2025.

They request that more evidence on the anticipated NOx reductions of the LPG scheme must be provided with an ongoing system to monitor emissions from converted vehicles. In addition, information on the impact on particle and hydrocarbon emissions should also be provided and taken into account. This is crucial as the age limit for taxis newly converted to LPG would remain at 15 years and not be subject to a phased reduction.

They ask that should the scheme be demonstrated to be effective, that is, by ensuring that the emissions from converted vehicles achieve the expected reductions, then other taxi classes should also be converted. Currently the new LPG conversion grant will only be available for a limited number of younger Euro 5 taxis. However, Euro 6 taxis which have higher emissions than Euro 4, for example, do not appear to be targeted with any specific action and as they are newer will be in circulation the longest. They further state that the success of LPG conversions will also be dependent on the availability of refuelling facilities. There are 50 across London however few are located centrally.

They conclude by stating that they welcome measures to deal with emissions from taxis but approaching it using an age-based system, rather than the highest emitters, means the most polluting vehicles are not being targeted first. Consequently, progress in achieving maximum reductions will take longer.

City of Salford Private Hire Association

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They mention the Miscellaneous Provisions Act 1976 and ask why not enforce three compliance tests or at least three emission tests per taxi and PHV over a certain age and state that even Euro 6 diesel cars emissions can be wrong.

They state that more should be done by Parliament to ensure all vehicle fuels have additive.

The provide information about age limits for taxis and PHVs in Salford, Greater Manchester.

They do not agree with removing the alternative fuel exemption and removing the hardship exemption.

They state that any outstanding debt on vehicles needs to be considered and mention the use wheelchair users and their use of taxis and PHVs.

Camden Civic Society's Air Quality, Green Open Spaces and Trees group (AQGOST)

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They consider it outrageous that black cabs are exempt from the ULEZ charge. They state that the new taxi is excellent and much bigger grants to scrap Euro 3, 4 and 5 should immediately be introduced.

The further state that age is not the appropriate criteria but that the emissions of different generations of Euro is what's needed to replace age. They request that all diesel-engine taxis with Euro 3, 4 and 5 engines are taken off the road fastest.

They do not agree with the proposal to remove the alternative fuel exemption. However they do agree to removing the historic and classic/niche exemption and removing the hardship exemption.

Clean Air Brent

They support The Mayor's proposals to reduce the maximum age limits for London taxis, but consider them inadequate to deal with the scandalous situation under which a fleet of some 20,000 taxis are responsible for 25 per cent of the NOx pollution on central London's roads. Instead they urge that taxis should be included in the Ultra Low Emission Zone (ULEZ) scheme, just as minicabs and other private hire vehicles (PHVs) are.

They suggest considering prioritising the phasing out of the most polluting taxis (by engine type) instead of relying on the crude proxy that "age of vehicle means most polluting".

Having welcomed the proposals as far as they go, they doubt that they will achieve the improvements forecast in the consultation document.

On the assumption that the regime of taxi regulation by age is to continue into the indefinite future – and with it the traditional design producing a large and heavy vehicle needing a gas guzzling engine to propel it - then they consider that TfL's new proposals to reduce the maximum length of life for a licensed taxi in a very gradual way to be a rather small step in the right direction. There is one minor exception to this and they are unable to see why a taxi converted to LPG which achieves the

reduction in emissions set out in TfL's document should have its life limited if it passes other relevant tests.

They suggest that if there were more taxi parking areas reserved on the streets there would be less need for taxis to be driven around looking for passengers. They also suggest that arrangements for taxis collecting passengers at airports and train stations could be designed to discourage long slowly moving queues of "black cabs" by allowing all vehicles collecting passengers reasonable time-limited access for the purpose.

Clean Air in London (CAL)

They consider that TfL's approach to reducing taxi emissions is far too timid, they make several suggestions including:

- Scrap the proposed reduction in the 15 year age limit i.e. maintain the age limit as it is
- Require all diesel and LPG taxis to be at least Euro 6 or certified equivalent for particles and NOx by 2020. They suggest that TfL should allow funds from the taxi de-licensing scheme to pay for a certified retrofit to Euro 6 or better for Euro 5 taxis
- TfL should also work with other cities to ensure that these retrofitted taxis can be sold second hand to other cities.
- All taxis to be ZEC by 2025 or better i.e. electric
- Make it easier for passengers to choose the cleanest taxis, if they wish, when hailing or booking them. They suggest this might be done by public education, apps, messaging to corporate account holders or introducing a German-type scheme whereby passengers can opt to choose the first ZEC taxi in a taxi queue (i.e. rather than a diesel or LPG taxi).

They would like to see the standards consistent for both the taxi trade and PH trade.

They also state that there needs to be an adequate supply of rapid charging points.

Enfield Cycle Campaign

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis. They agree with the proposal to remove the alternative fuel exemption and removing the hardship exemption.

Gastech LPG London Taxi Technology

Gastech understands that both the Mayor of London and the TfL's concerns in trying to reduce automotive exhaust emission pollutants by the introduction of electric taxis and their desire to take dirty diesel taxis off the London streets. They suggest that the introduction of a £5M grant scheme for the conversion of 1000 TX4 Euro 5 taxis to LPG is a step forward in the right direction. They would like the original 15 age limit retained for LPG taxis.

They are very concerned that the LPG conversion extension has been reduced from five to three years. They consider the LPG extension to the age limit should be retained at five years so that both taxi fleets and individual taxi owners are able to have a decent return on their LPG investment should they wish to convert.

Gastech is also concerned that they may only be able to sell their current Euro 6 LPG technology for their TX2 model until end of October 2019, and need assurances that they can continue to sell this technology beyond this date due to the investments they already have in their production pipeline.

Gastech state that TfL is aware that they [Gastech] is currently converting a TX4 Euro 5 taxi to their Euro 6 LPG technology and will be emission testing at Millbrook in early June 2019. They state that the TfL certification process is an expensive path for Gastech to undertake and even if they achieve the TfL accreditation for this model taxi they may not see many conversions taking place for some time until they come closer to their age limit requirement. By this time the new age limits will have kicked in there may not be enough incentive for taxi owners to convert, even with the £5000 grant per taxi.

They propose the following for LPG converted Taxis:-

- 1) Retain the five year extension for Taxis converted to Euro 6 LPG technologies after October 2019
- 2) Allow TX2, TX4 Euro 4 and TX4 Euro 5 taxis to be converted to Euro 6 LPG after October 2019
- 3) Expand the £5000 grant per taxi to all taxi models

GMB Union

They agree that taxis should play their part in reducing harmful NOx emissions in London. They do not agree that we should mandate the maximum taxi operating age. They also disagree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They state that ZEC taxis should have a 20 year limit due to the high capital outlay and the claimed high quality of the vehicle. They mention that airliners have a similar age and are in service still. They also see no reason why LPG vehicles could not have a similar limit.

They do not agree with the proposals to remove the alternative fuel exemption and the hardship exemption. However they do agree with removing the historic and classic/niche exemption.

They state that there are many drivers who cannot afford to get on the ownership ladder. Grants and finance plans would be a welcome route towards helping drivers achieve ownership. They mention that the existing LEVC taxis are not fully ZEC and that this is creating inertia.

They accept that those with Euro 3 and 4 taxis are in lower numbers than other groups but mention the cost of replacement for many who may be in the latter years

of work and also that some may not be keen to invest in a replacement vehicle. They suggest an alternative may be to offer a driver retirement scheme or use of a pool of cleaner taxis that is held in cooperative partnership with the Mayor. They also suggest that as Vito taxis cannot be converted perhaps enhanced payments should be made to enable change. They state that the other major issue is still plug in points and their availability, and price gouging in instances such as Heathrow Airport and BP for electricity use itself. They say that alternatives must be found.

They suggest that TfL could run a competition to find a company to design a retrofit device capable of being fitted to taxi and van.

They are mindful that drivers are also finding the accessibility of certain streets in London problematic due to road closures and these can extend journeys.

They would like to make sure that drivers are included in discussions.

Haringey Living Streets

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They also agree with the proposal to remove the alternative fuel exemption, removing the hardship exemption and the historic and classic/niche exemption.

They consider that this is a more than proportionate response by TfL and further action should be considered in conjunction with this work on age limits in terms of a) removing and congestion charge exemptions that taxis enjoy currently and b) ensuring that taxis are not exempt from any other/future charges such as ULEZ.

It is also vital that taxis are subject to other policies that are outlined in the MTS such as Vision Zero and that as soon as possible they are fitted with safety devices such as mandatory intelligent speed assistance when they are in use on London's roads.

Kingston and Sutton Shared Environment Service

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis. They also agree with removing the historic and classic/niche exemption.

LB Camden

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They do however consider that the proposed phased reduction should go further; 12 years maximum age limit by 2022 is not firm enough. PHV's licensed by TfL currently

have a 10 year age limit. They suggest that the maximum operating age for taxis should be no greater than 10 years.

They question if an aged phased approach is best. They suggest that vehicles should be targeted based on their emissions rather than age in order to have the greatest possible impact. They state that based on this, Euro 5 taxis should be targeted first as the consultation document highlights that their emissions are higher than Euro 3 and 4 taxis under real world testing conditions. They also say that Euro 6 non-ZEC vehicles should also be included in the phased approach as they have higher tailpipe emissions than the Euro 4 taxis which are being considered in the phased approach. They also mention that a 15 year license on a Euro 6 taxi will conflict with the Mayor's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy).

They do not agree with Euro 6 vehicles having a 15 year licence and ask that they have a licence age no greater than 10 years.

They request that we should also take into consideration brake and tyre wear which contribute to particulate levels which there is no safe exposure limit for.

They note that whilst LPG and ZEC vehicles are cleaner, technology will progress to reduce emissions from brake and tyre wear but a 15 year limit would slow the uptake of any new technology around this area as currently seen in the slow uptake of ZEC taxis. They request that Euro LPG and ZEC taxis should have the same age limit as non ZEC and LPG taxis.

They also agree with removing the historic and classic/niche exemption and removing the alternative fuel exemption.

They suggest we should re-consult on the hardship exemption and provide additional details of what would classify as an exemption and what can be done to tighten it to ensure it isn't taken advantage of.

They refer to the Integrated Impact Assessment, and that a lack of charging points is identified as an issue however, TfL state that this will be mitigated as there will be 300 charge points by the end of 2020. They do not believe that this will be enough to firstly install confidence in drivers to switch to a ZEC vehicle and secondly to charge a fleet of 9,000 zero emission capable vehicles.

They recommend that TfL install rapid charging hubs which hold three chargers per location. They also recommend that TfL consider replacing some taxi rest rank spaces in order to accommodate dedicated taxi only rapid charge points.

They consider there is a conflict with the Mayor's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy) and the whole of London zero emission by 2050. This commitment should be taken into consideration when consulting on taxi licensing age limits as the proposed age limits will conflict with the Mayoral commitments for a zero emission central London.

LB Ealing

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis. They request that these limits should apply to PHVs too. They would prefer only zero NOx emission vehicles (i.e. electric) to get the 15 year extension.

They agree with the proposals to remove the alternative fuel, historic and classic/niche, and hardship exemptions.

They acknowledge that there may be a financial impact on a small number of taxi drivers, but the policy of improving air quality is high on the agenda for the Council.

LB Hammersmith & Fulham

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They suggest that there should be maximum age limit of 10 years from the 1 January 2020 for all taxis including Euro 6 diesel taxis. They suggest this as there is currently already a 10 year age limit for PHVs so for consistency the age limit should be the same for all taxis including current diesel Euro 6 vehicles.

They further suggest that TfL should target the most polluting vehicles first especially as Euro 5 diesel vehicles have higher tailpipe emission compared to diesel Euro 3 and 4 vehicles, and diesel Euro 6 vehicles have higher tailpipe emissions compared to diesel Euro 4 vehicles. They suggest that targeting the most polluting taxis first will ensure the most pollution reduction in the shortest time possible. A 10 year age limit would also incentivise the earlier modal shift to ZEC vehicles and support the Mayor of London's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy).

They state that the 15 years age limit for ZEC and LPG taxis is not ambitious enough especially as some cities in the UK such as Manchester will be limiting taxi age limits to 10 years from 2020. In addition Euro 6 diesel taxis should not have a 15 year age limit as they have higher emissions compared to Euro 4 taxis. It is recommended that to achieve a greater reduction in NOx emissions from the taxi fleet that the age limit should be no greater than 10 years for all vehicles, and particularly for all diesel fuelled and pre Euro 4 petrol fuelled vehicles.

They agree with the proposal to remove the alternative fuel exemption and removing the historic and classic/niche exemption.

They note that the consultation doesn't take into account PM10 and PM2.5 emissions from brake and tyre wear. They note that consultation also doesn't take into consideration the Mayor's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy), the proposed age limits would not support this commitment.

LB Islington

They point out the initiatives the borough is doing to improve air quality in the borough and welcome the opportunity to work with TfL on this.

They support the proposals but have reservations. They support a phased approach to age limit reductions but ask to see the reasoning for 12 years being proposed rather than 10 years.

They have some concerns with the proposal that Euro 6, LPG and ZEC taxis should have a 15 year age limit as Euro 6 taxis are worse than Euro 4 for NOx and some way behind LPG and ZEC taxis. They mention that by 2025 there will be no discount for electric vehicles operating in the ULEZ but we are proposing that Euro 6 should be able to operate for a further nine years. They also mention that while new taxis need to be ZEC there is no requirement for them to use only electricity. They agree with the proposal to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

Islington welcome funding support for taxi owners to delicense their taxis as well as additional funds for ZEC taxis and say that these should be reviewed periodically. Islington would ultimately like to see a move away from diesel vehicles altogether rather than just a move to a new euro grade diesel vehicle.

LB Lambeth

They state that cutting emissions is critical for the wellbeing of their citizens, both today's and especially tomorrow's. In Lambeth they have already declared a Climate Emergency, committed to being carbon neutral by 2030 and will continue to deliver their ambitious 2017-2022 Air Quality Action Plan. In the borough, road transport is the biggest source of air pollution and they strongly support the proposal to reduce the maximum age limits for taxis and the majority of other recommended measures in this consultation.

In their answer to question one, they state that they understand at present, taxis contribute around 20 per cent of all NOx traffic-related emissions in central London and that, without interventions, taxis will be the single biggest source of NOx by 2020. Emissions affect the health and wellbeing of the borough citizens; and unfairly discriminate against the poorest in our society who often live near busy roads, and are therefore more likely to suffer from the effects of poor air quality, but less likely to be able to afford to use a taxi. They state that London is facing both a public health and an environmental crisis, and everyone must play their part in reducing harmful levels of emissions.

In answering question two, they agree that TfL should mandate the maximum taxi operating age. However, they consider the current 15 year age limit is too lenient. They make the point of Leeds City Council operating an age criteria of seven to eight years, depending on the type of vehicle. Drivers can apply for their vehicle to be licensed beyond seven to eight years of age, up to a maximum of 10 years of age (or 12 years of age for a five, six or seven seater wheelchair accessible vehicle, or an ultra-low emission vehicle), following an age inspection. They also understand that in

Manchester, an age limit of 10 years is in place since 2008, on taxis that are identical to those operating in London. They suggest that the maximum operating age limit should be 10 years.

They further note another issue is to tackle idling taxis, like at Waterloo Station, which is a significant source of air pollution. The borough would like to work with TfL and the taxi trade to reduce idling, which affects citizen's including taxi drivers' health.

For question 4 the borough considers that the 15 year age limit for Euro 6, LPG and ZEC taxis only takes in to account tailpipe emissions and not Particulate Matter air pollution from brake and tyre wear. They therefore do not support a 15 year age limit, and instead believe these vehicles should also be subject to a 10 year limit. The borough further expects that over the next few years there will be significant development in technology to reduce brake and tyre wear emissions. Allowing Euro 6, LPG and ZEC taxis to operate for up to 15 years will therefore slow the uptake of this new technology and lead to air pollution levels being higher than necessary.

For question five, they strongly agreed with removing the alternative fuel exemption and the historic and classic/niche exemption

They didn't agree with our decision to remove the hardship exemption, as they do not want to penalize the livelihood of these workers, particularly when they are facing challenging circumstances. Instead they recommended keeping this exemption, but consider tailoring the condition to taxi driver's individual needs, such as only offering a 6 month extension instead of a blanket 12 months.

They continue to note that sometimes disabled drivers have special adapted vehicles which are expensive to replace and suggest TfL considers how our proposed measures may affect these drivers specifically, and also consider potential exemptions or aids to ensure these drivers are not penalised.

In response to question six, they recommend that to meet the target of 9,000 ZEC taxis operating in London by 2020, more charging points or installing charging points that are capable of charging multiple vehicles at the same time are needed. Furthermore, they suggest these charging points are located in close proximity to rest ranks spaces for drivers to encourage use.

LB Lewisham

They consider that overall, the premise of reducing the age to which black cabs can be licensed is a positive one however, bearing in mind that according to TfL a quarter of NOx emissions in the centre of London come from London taxis, the age limit of 12 years by 2022 is not nearly sufficient and it is not clear as to how this will reduce the emissions by as much as 65 per cent of 2013 values by 2025. They also query how this relatively subtle approach is helping reduce the exposure of passengers (and drivers) to the known high pollution levels within the taxis themselves.

They note that the government is offering up to a £10,000 incentive to the first 1,250 drivers wishing to buy a new vehicle - there are 21,000 black cabs licensed and currently only around 1,100 ZECs in operation. They suggest a greater incentive scheme with the capacity to reach all drivers rather than a small percentage may have more impact.

LEVC

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They mention that to meet TfL's requirements ZEC taxis are only required to achieve 30 miles in pure EV mode but that because of the duty cycles of taxis and Light Commercial Vehicles this minimum requirement should be increased to 50 miles. They state that there are several vehicles in the market which can achieve this including LEVC's TX.

LEVC consider a 15 year age limit for Euro 6, LPG and ZEC taxis is appropriate, and state that their products are designed to meet the demanding requirements of commercial vehicles. They also mention that with the benefit of ZEC taxi and taxi duty cycles they consider a 15 year age limit on ZEC taxis is appropriate.

They agree with the proposal to remove the alternative fuel exemption and removing the historic and classic/niche exemption.

They accept that there are always exceptional circumstances where a driver may be impacted and the hardship exemption maybe appropriate. They want to avoid drivers being removed from the trade and suggest that there could be a review of the hardship exemption which provides support (this could include financial) and ensures drivers are not penalised, denied the opportunity to make a living and leave the trade prematurely.

LEVC recognises the positive impact the proposed initiatives will have on air quality but stress the need to also recognise the potential short term impact on drivers' financial status. These financial impacts include depreciation of the outgoing taxi resulting in a lower sales value, the additional investment to upgrade to a ZEC taxi as well as the potential loss of earnings while waiting for the delicensing scheme to be administered. LEVC supports the proposal however stresses TfL must recognise the importance of supporting the trade, maintaining trust and actually delivering on promises that have been made.

London Cycling Campaign (LCC)

They welcome the opportunity to comment on reducing the maximum age limits for taxis.

They strongly support plans to improve air quality in London by changing, from 15 to 12 years, the age limit on black cabs, and encourage the uptake of Zero Emission Capable (ZEC) vehicles, in order to forestall the TfL forecast that black cabs could

become the 'the biggest source of road transport NOx (nitrous oxide) emissions' in London.

London Living Streets

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They further agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They state that the principle of the polluters pays is established in London. They consider it vital that unnecessary movements by taxis (and other motor vehicles) in London are reduced substantially in order to a) support the long-term mode share targets in the MTS, b) support air quality targets and c) to support Vision Zero targets. They consider it entirely appropriate that (as in New York) a levy/charge potentially as part of a wider Road User Charging programme includes taxis as a matter of urgency to reduce the impact of the high levels of NOx that they emit. They note that while it is of course right that there could be exemptions for people with disabilities, it is not right that there is a subsidy for highly polluting travel by private motorised travel as occurs with taxis and PHVs at present.

They agree with the proposal to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

They state that it is entirely appropriate that taxis should play a full part in reducing harmful NOx and particulate emissions in London as they deliver currently high levels of harmful emissions in proportion to the numbers of journeys that they facilitate. As a result, they contribute significantly to poor air quality in the capital. They further state that it is important to underline TfL's legal obligation to act and note that every sector has to take its cut.

They consider this is a more than proportionate response by TfL and further action should be considered in conjunction with this work on age limits in terms of a) removing any congestion charge exemptions that taxis enjoy currently and b) ensuring that taxis are not exempt from any other/future charges such as ULEZ.

They further state that it is also vital that taxis are subject to other policies that are outlined in the MTS such as Vision Zero and that as soon as possible they are fitted with safety devices such as mandatory intelligent speed assistance when they are in use on London's roads.

London Suburban Taxi Coalition (LSTC)

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. They do not agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They do not agree with the proposal to remove the alternative fuel exemption and removing the historic and classic/niche exemption as well as the hardship exemption.

They note that suburban drivers work in their sector 99 per cent of the time. The LSTC request subsidies for Suburban drivers so as they can afford LPG conversions and ZEC taxis. They make a further request to remove Uber.

Love Wimbledon BID

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age as well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with the proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

Licensed Taxi Drivers' Association (LTDA)

They note that London's taxi trade is committed to reducing its contribution to NOx emissions and doing its bit to help clean up London's dirty air. They recognise the significant contribution of older, more polluting diesel taxis to emissions in London. Cabbies know all too well how important it is to tackle rising air pollution, with one of worst places to breathe in this dirty air being stuck in traffic, behind the wheel of cab.

The further state that the trade is proud to be leading the charge to a cleaner, greener London since LEVC's ZEC taxi hit the streets in early 2018. They consider the new electric taxi is a game-changer for the trade. Over 1,400 TXEs are out on London's streets, and many more taxi drivers are keen to make the switch as soon as they can.

They welcome that the Mayor and TfL reinstated £24 million to the taxi delicensing scheme earlier this year. However, the LTDA is concerned that TfL's proposals to reduce the maximum age limit for taxis will have a detrimental impact on the trade.

The LTDA considers there is a workable alternative to TfL's current proposals which would deliver greater NOx emissions savings from black cabs and protect the future of London's historic taxi trade.

The LTDA does not agree with TfL's proposals to reduce taxi NOx emissions through a phased reduction in the maximum taxi age limit for Euro 3, 4 and 5 vehicles to 12 years by 2022, and to mandate the maximum taxi operating age. They consider that it is not the most effective way to reduce the trade's contribution to NOx emissions in London, and that it will have a disproportionately negative impact on the trade and the livelihood of its drivers.

They raise concerns about the resale and rental markets and the impact the proposals have had on it. They are concerned about the cost of the new ZEC and Euro 6 taxi.

The LTDA also does not agree with the proposals to remove the alternative fuel, historic and classic/niche, and hardship taxi age limit exemptions.

The LTDA suggests that by retrofitting all licensed Euro 5 diesel taxis in London to a certified Euro 6 standard, more NOx emissions will be saved than if TfL reduces the taxi licence age limit from 15 to 12 years over a phased period between 2020 and 2022 (alongside mandating the maximum taxi operating age to the same as the relevant age limit from November 2019). They set out information on the proposal and state that it would provide a better NOx saving compared with TfL's current proposals.

They further state that while the oldest Euro 3 and Euro 4 taxis will remain in the fleet for a short time under the LTDA's proposals, these vehicles are mostly driven by members of the trade who are using them less than newer drivers. In addition, almost all remaining Euro 3 taxis (bar 80) would be scrapped by 2022 even if the age limit remains at 15 years. They assert that retrofitting 4,500 Euro 5 taxis – being the most heavily utilised vehicles in London – would deliver much more significant NOx savings, even if the older Euro 3 and 4 taxis remain within the fleet until they reach the 15-year age limit.

The LTDA have sourced a retro fit system and is convinced its proposals for this system would be the best use of the taxi clean air budget and utilising the money in this way would significantly help the taxi trade reduce its contribution to pollution levels much earlier than under TfL's age limit reduction proposal. The additional benefit of retaining residual values in existing vehicles would enable more owners to upgrade to ZEC vehicles in the short to medium term and result in a fully ZEC fleet much earlier than would otherwise be the case.

MASC (Make Air Safe & Clean)

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. As well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with the proposals to remove the alternative fuel exemption and removing the historic and classic/niche exemption. They ask for consideration of grants to help with hardship issues.

Mytaxi

They agree that taxis should play their part in reducing harmful NOx emissions in London and that we should mandate the maximum taxi operating age.

They understand that making the switch to electric vehicles will take some time. They are working with investment companies and electric vehicle manufacturers to see how they can help drivers to make the switch.

They consider that it is vital all elements of the transport system play their part. For example, while there are approximately 21,000 taxis there are over 85,000 PHVs. It is important to ensure that this is being looked holistically with all mobility providers playing their part. They request that TfL should also explore what contribution PHV can make to meeting sustainability targets and ensure that there is a consistent approach being applied across the board.

Any decision to reduce the age of vehicles by one year should be accompanied by a plan to fully support this transition. This plan should ensure there are sufficient incentives in place to support drivers' transition to lower-emission vehicles give the important role taxis play in the mobility landscape.

They state that over the past number of years a significant number of drivers have transitioned to Euro 6, LPG and ZEC taxis. As rightly noted in the impact assessment these vehicles emit lower levels of NOx than their predecessors, and therefore they consider it right that they are subject to the 15-year age limit. They

note that it is important to give drivers and users regulatory certainty therefore, it is vital that these limits remain in place.

They agree with the proposals to remove the alternative fuel exemption and the historic and classic/niche exemption but do not agree with removing the hardship exemption.

Netley Primary School

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age as well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

NW3 Green School Runs

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. As well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

Public Health England (PHE)

PHE supports measures to reduce sources of air pollution and people's exposure, such as those outlined in the consultation document.

They note that the consultation document acknowledges that the proposals will be financially burdensome to taxi drivers, especially as many are self-employed, and could lead to increased unemployment. The health and equality assessment reported negative impacts on drivers as a result of the economic impacts. This may disproportionately affect the 18 per cent of taxi drivers that live in the 20 per cent most deprived Lower Layer Super Output Area. They encourage sensitivity analysis procedures be used to explore and quantify these impacts, and that evaluation strategies be put in place to monitor the effectiveness and share wider learning.

They also encourage consideration of emissions from brakes, tyres and road wear, which will not be affected by reducing the age of vehicles, as well as the need for charging infrastructure, ideally from renewable sources, in case of a switch to electric taxis.

They note that the Integrated Impact Assessment (IIA) report documents the assessment of the predicted environmental, health, economic and equalities effects of the proposals. The proposals are predicted to bring about health and environmental benefits by reducing tail-pipe nitrogen oxide (NOx) emissions. The proposals, along with the newly enhanced delicensing scheme, providing up to £10,000 to taxi owners who delicense Euro 3, 4 or 5 vehicles early (launched on 14 January 2019), are expected to deliver the 65 per cent reduction in harmful taxi NOx emissions. Reductions are also expected in central London taxi-tail pipe carbon dioxide (CO2) and coarse particulate matter (PM10) emissions by 60 and 95 per

cent respectively. However, it is not currently clear how the package of measures in the documents will achieve this. The 2013 London Atmospheric Emissions Inventory (LAEI), released in August 2016, estimated that approximately 37 per cent of PM10 generated by road vehicles in the City of London is caused by the general wear of tyres and brakes. As electric vehicles are traditionally heavier than fossil-fuelled vehicles, electric vehicles may potentially produce more emissions in vehicle braking.

They encourage that sensitivity analysis procedures are used to explore and quantify impacts as a result of a reduction in the taxi fleet leading to longer wait times and negative impacts in relation to safety and crime. They suggest that evaluation strategies are put in place to monitor the effectiveness. They also encourage the consideration of emissions from brakes, tyres and road wear.

Regulatory Services Partnership

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. As well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

RMT Union

They agree that taxis should play their part in reducing harmful NOx emissions in London. They do not agree that we should mandate the maximum taxi operating age nor with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They would like it noted that in April 2014 there were 22,810 taxis licensed in London and all were diesel but the latest figures show (as of 21 April 2019) there are 19,955 taxis licensed in London of which 1370 (approximately) are ZEC, which means there approximately 18,585 are diesel powered. They state that there are approximately 1000 fewer diesel powered taxis as of 21 April 2019 than there were at the beginning of 2019, meaning that an average of around 62 diesel powered taxis are leaving the fleet every week since the start of the year. Therefore the necessity to go further by reducing the age limit is negated by the fact that numbers are already reducing at a high rate.

They state that reducing the age limit could cause an unnecessary shortage of vehicles which could create a situation where licensed drivers are unable to work due to a lack of vehicles.

They mention that it could also create a situation where there is a shortage of taxis available for the public to be able to hire, and this would have an adverse affect on taxi drivers business and would continue the complicit extinction of the licensed London taxi trade by TfL.

They consider that Euro 6, LPG and ZEC should have the fullest lifespan possible but do not agree that the vehicles' lifespan should end at exactly 15 years as proposed. They state that the cost of a new ZEC vehicle is excessive and this can be offset by allowing a vehicle to be continued to be licensed beyond its 15th anniversary and up to 16 years. This helps drivers to plan the purchase of a new or

newer vehicle and the vehicle would still be ZEC even though it is between 15 and 16 years old. They state that making a strict 15 year limit is unnecessary and the purpose of this consultation is to reduce the level of NOx emissions from taxis, not to penalize owners of ZEC vehicles by introducing a stricter age limit criteria.

They do not agree on the proposal to remove the alternative fuel exemption.

RMT do not consider it is necessary to reduce the age limit on Euro 3, 4 and 5 vehicles, especially when you consider that the NOx emission rate on Euro 3 and 4 is lower than the NOx emission rate on a Euro 6 vehicle.

Southwark Council

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis. They suggest that the age limit should continue to be reduced to 10 years by 2024 to match that of other UK city regions.

They note that Euro 6 taxis have higher NOx emissions than Euro 4 so all should have the same age limit.

They suggest that LPG and ZEC taxis could have greater age limits assuming they meet technical/emissions test specifications and maintain their emissions performance throughout their lives. Differing taxi emissions could be recognised by variations in the annual taxi licence fee to promote low/no emission taxis.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

They suggest that differing taxi emissions should be recognised by introducing rank permits with differing charges for low/no emission taxis at popular/busy taxi ranks e.g. main line stations. This will reduce the taxi emissions that cause the poor air quality hotspots caused by over-ranking by diesel powered taxis. Variable rank permit charges could reflect both the taxi emissions standard (free or cheap for zero emissions capable, high for old diesels) and times of day (low charge at time of day when there is un-met demand and high charge at times of day when there is un-met supply).

A further suggestion was that road traffic orders should be introduced at all ranks to prohibit idling by taxis that are stationary, either on the rank or when queuing to join the rank.

Southwark Cyclists

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They suggest reducing the number of taxis in total and stop idling in ranks as its still goes on despite the rules.

They agree with the proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

Sustrans

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They suggest that the harmful emissions from Euro 6 taxis are likely to be considerably higher than LPG and ZEC models, and as their real world emissions are likely to be even higher than forecast during laboratory testing, they do not consider that Euro 6 taxis should be allowed to retain a 15 year age limit.

They request that all diesel taxis should be phased out as quickly as possible, and Euro 6 taxis should also be subject to the phased maximum age limits.

They agree with the proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

The International Council on Clean Transportation

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They make some additional suggestions;

1) NOx retrofitting for Euro 5 taxis could be part of the solutions considered. Retrofit solutions could bring much quicker air pollution improvements without the need to anticipate vehicles delicensing or scrapping. The cost per vehicle would be lower than a conversion to LPG (below 5000 pounds per vehicle), could be entirely covered for taxis' owners (such as your LPG fund), and mandatory for Euro 5 vehicles that will remain for years on London streets.

ADAC and JRC recently tested state-of-the-art retrofit solutions and have shown significant NOx reductions with a relatively low increase in CO2 emissions. These solutions can now provide constant fleet-monitoring of the retrofit efficiency to prevent malfunctions, lack of top-up of the NOx reductant agent and tampering.

2) Software retrofit should be considered as a least-cost option. Euro 5 TX4 LTI taxis are using the R 425 engine from VM Motori (a sister company of FCA, Fiat Chrysler Automobiles). The extremely poor real-world NOx emissions of the Euro 5 TX4 could be substantially improved performing mandatory calibration updates similarly to what the VW group, FCA itself, and other manufacturers have announced in the wake of Dieselgate. The type-approval authority that certified this vehicle model type should be approached. The impact of the software retrofit on CO2 emissions and engine durability would have to be assessed and guaranteed by the manufacturer.

3) Vehicles delicensed as taxis can still be used as passenger cars and therefore still driven in London. Even though these vehicles would have to pay to drive in the ULEZ and probably drive less than taxis, TfL should evaluate the mitigation of the delicensing benefits on air quality.

They further suggest that NOx retrofitted vehicles could also be subject to a 15 years age limit.

They agree with the proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

The Knightsbridge Residents Management Company Limited

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They request that we should be encouraging more hybrid and electric vehicles.

They agree with the proposals to remove the alternative fuel exemption, historic and classic/niche exemption and the hardship exemption.

London Motor Cab Proprietors Association (LMCPA)

They note that the trade is changing from diesel to electric cabs but despite reassurances from TfL that there would be five approved taxis and a copious amount of charging points, they now have only one vehicle available and the performance of this vehicle is not very good. There is also a woeful shortage of charging points.

They question, if TfL are concerned about air pollution in London why do they insist on issuing licences to non-electric mini cabs or buses, as they understand that bus companies are now allowed to use Euro 6 vehicles.

They claim that TfL have succeeded in bringing London to a standstill by issuing licences to drivers at a pace which is unprecedented. TfL have also closed so many roads now that the traffic is almost at a standstill. They also state that TfL have put in place a new ultra-low exclusion zone, which once again affects businesses trying to operate in London.

They state that the licenced taxi trade will fight decisions which are detrimental to their businesses.

They further state that they will be looking at the legal position of TfL taking away three years from each taxi in their fleet and they will expect to receive in compensation £28,800 loss of earnings per cab for every cab taken off the road three years earlier than promised if this plan goes ahead. Added to the cost of this would be the loss of earnings of every owner driver. They would advise any taxi driver affected by this to take TfL to court for loss of earnings and discrimination, as other London transport operators have not had the same restrictions placed upon them. They state that people bought taxis in good faith and if this proposal goes ahead it will effectively devalue every purpose-built taxi in London.

They conclude with a request that TfL and the LMCPA could work together to supply London with the standard of taxis that the older generation remember with pride and the public deserve.

Three Rivers District Council

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They consider 15 years is too old for a licenced vehicle. They are currently reviewing their policy and looking to have a maximum age for new vehicles of seven years and Euro 5 standard for emissions. Vehicles renewing will be required to provide six monthly compliance certificates up to 10 years then every three months once they are 12 years and older.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption.

United Cabbies Group (UCG)

They state that the London taxi trade is committed to reducing its contribution to NOx emissions and meeting its obligation to reduce these harmful levels of emissions and help clean up the air all Londoners breathe.

They note that the taxi trade is contributing to cleaning up London's air with the introduction of LEVC's ZEC taxi.

They have concerns that from January 2018 the only vehicle available to the trade is the LEVC ZEC taxi and this is a vehicle that the majority of the trade cannot afford.

The UCG welcome the news that the Mayor and TfL have reinstated £24 million to the taxi delicensing scheme earlier this year as these additional grants will go some way in helping taxi drivers who want to purchase a ZEC taxi.

The UCG are greatly concerned that TfL's proposals to reduce the maximum age limit for taxis will have a massive detrimental impact on the trade. They state that if these proposals are implemented it would wipe £45-70 million off the value of the taxi fleet and this would be devastating to the taxi trade.

The UCG claim that there is an alternative to TfL's proposals which would deliver greater NOx emissions savings from taxis. They strongly disagree with the proposals to reduce NOx emission through a phased reduction in the maximum taxi age limit for Euro 3, 4 and 5 vehicles and the mandating of the maximum operating age.

They state that since the proposals were announced in December 2018 there has been a significant fall in second-hand value of London taxis.

The UCG does not agree with the proposals to remove the alternative fuel, historic and classic/niche, and hardship taxi age limit exemptions.

The UCG suggests that exploring options such as retrofitting all licensed Euro 5 diesel taxis in London to a certified Euro 6 standard, encouraging LPG and having a choice of more than one taxi would mean that more NOx emissions will be saved than if the taxi age limit is reduced from 15 to 12 years.

The UCG recognise that TfL have a duty of care to the wellbeing of Londoners and the toxic levels of pollution in London is a worry for all and some action needs to be taken.

They also acknowledge that TfL have no duty of care to individual taxi drivers, but TfL does have a duty of care to the London taxi trade in its role as the regulator. The UCG considers that if TfL implement these proposals it will bring into question just what duty of care TfL are affording the London Taxi Trade.

In closing the UCG are totally opposed to TfL's proposals to reduce the age limits.

UK100

They agree that taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age and with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They consider that TfL needs to be even more progressive and follow other UK cities' lead, and that nine or seven years would be better.

They suggest that technology will improve and performance will reduce so there should be lower age limits to reflect those of other fleets.

They agree with the proposals to remove the alternative fuel exemption and the historic and classic/niche exemption.

Unite the Union

Unite state that it has obtained the views of thousands of taxi driver members through lay member committees at national and regional level. Therefore Unite is in a unique position to submit a response to this TfL.

While they support the goals to reduce harmful NOx emissions from taxis by 65 per cent by 2025, they are concerned about the approach and the lack of effective mitigation plans which is putting jobs at risk.

They suggest more funds directed towards grants for buying new compliant taxis.

They agree taxis should play their part in reducing harmful NOx emissions in London and that there should be a mandate for the maximum operating age for taxis, this needs to be set at the 16th year under the current 15 year age limit; until TfL explores and identifies other options.

They request further consideration to the proposals for 12 year phased age limit reduction for Euro 3, 4 and 5 as raised in question 3 of the consultation, and recommend that the 15 year age limit should stay until other options such as abatement equipment are identified. They are also concerned that this proposal will give PHVs an unfair advantage over taxis.

They make several suggestions for TfL's consideration including;

- Increasing capital allowances and access to affordable credit for taxi drivers to switch to cleaner vehicles plus a national diesel scrappage scheme
- There being more affordable vehicle options
- Government investment in research and development of new sustainable technology
- Drivers requiring a comprehensive charging infrastructure and the Government being the lead for the provision of a charging infrastructure network

They support the proposal for Euro 6 taxis to be subject to the 15 year age limit, but see no reason to reduce the age limit for LPGs, which currently have a 20 year age limit, or ZEC vehicles which are accepted in the new scheme, to the 15 year limit.

They call on TfL not to remove the alternative fuel, historic and classic/niche or the hardship exemptions.

The state that the process of age limit changes on Euro 3, 4 and 5 should not commence while there is only one type of electric taxi vehicle on the market.

UPHD

They agree with taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. As well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They request that the limits should be reduced to 10 years, as it is for PHVs, and that taxis should be subject to the Congestion Charge in the same way as PHVs are.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption. They state that if drivers are not earning enough on the street then the answer is not hardship allowances. Instead they suggest that the answer is an increase of the tariff, enforcement of PHV cap and enforcement of worker rights as condition of license for PHV operators. They consider hardship allowances simply mask the problem with public subsidy.

New West End Company

They welcome improvements in engine technology and the availability of cleaner fuel taxis. They consider it timely that the maximum age limit of polluting taxis is reduced from fifteen to the proposed twelve years and exemptions are ended.

They encourage consideration of more granular licensing of taxis by geographic areas or zones, restricting access to highly polluted areas only to cleaner taxis.

West Hampstead Amenity & Transport

They agree with taxis should play their part in reducing harmful NOx emissions in London. They also agree that we should mandate the maximum taxi operating age. As well as the proposal to reduce the age limit for Euro 3, 4 and 5 taxis.

They would like to see the changes made sooner if possible.

They agree with the proposals to remove the alternative fuel exemption, the historic and classic/niche exemption and the hardship exemption. They suggest there should be a level playing field between minicabs and taxis.

Westminster City Council

They state that 8.5 per cent of Westminster's NOx emissions come from taxis, and know from real world testing such as that produced by The Real Urban Emissions Initiative in 2018 that the most common type of taxi on their streets emits up to 30 times as much NOx as a petrol vehicle of the same age.

They broadly welcome these proposals from TfL to reduce the age limit of taxis which they consider long overdue and sadly less ambitious than proposals shelved by TfL four years ago. They state that TfL could and should be doing more to tackle emissions from taxis and are very disappointed that a diesel taxi purchased in 2017 could still be polluting streets in Westminster and throughout the rest of London up to 2032 without any penalty.

They advise TfL to undertake to publish modelling impacts related to, and strongly consider implementing;

- A 10 year age limit rather than 12 years
- Including Euro 6 diesel taxis in the reduced age limits

They welcome the recent doubling of the scrappage scheme payments for older taxis, and the slow but tangible progress that is being made to install rapid charging for taxis in partnership with boroughs. However, they would encourage TfL to be more ambitious in curbing emissions from the taxi fleet.

Westminster welcome the tightening of the maximum operating age for taxis.

In general they welcome the proposals to lower the maximum age limit from 15 years to 12 years but their support has a number of caveats.

They welcome the removal of the three age limit exemptions.

5. Responses to issues raised

5.1 Introduction

We have identified and considered the key issues raised by respondents to the consultation. This chapter describes those issues (including those raised by stakeholders) and provides our response to them.

In addition to this chapter, please note the full code frames at Appendix A.

The tables below will not align directly with the full code frames as these have been rationalised and this section only contains issues directly related to the proposals.

There were four 'open' questions in our online questionnaire which gave respondents the opportunity to provide written comments, although respondents were also free to submit their thoughts in writing by email or Freepost. The following tables are split into the four 'open' questions and issues raised predominately by stakeholders and others, which did not fit into a specific question.

5.2 Responses to issues raised in Question 3: Suggestions of other ways to reduce NOx emissions from taxis by 65 per cent by 2025

Reference number	Issue raised	Our response
1	This would create hardships for passengers from fewer taxis on the road and fares will rise	<p>TfL is responsible for regulating taxi fares and tariffs and these are normally reviewed annually. When we review taxi fares and tariffs we try to strike an appropriate balance between drivers being fairly remunerated and taxi users getting fair, reasonable and affordable fares.</p> <p>When reviewing taxi fares and tariffs we also consider the impact on users from potential changes and we try to ensure that increases are not too high. As part of every review we also give due and careful regard to the impact on users who share protected characteristics under the Equality Act 2010.</p>
2	This would create hardships for taxi drivers	<p>Our Integrated Impact Assessment identified some potential negative impacts on taxi drivers. These have been partly mitigated by proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit. There are a number of options available for other taxi drivers who are affected by the proposals including selling or delicensing their current taxi, leasing a ZEC taxi, buying a new ZEC taxi, sharing a taxi or buying a second-hand taxi.</p> <p>We are continuing to provide funding to support taxi drivers who wish to purchase a ZEC taxi plus our taxi delicensing scheme has been significantly enhanced. The new scheme now has top payments of £10,000 – double what the highest payment was under the previous scheme – available to the first 1,250 taxi owners. Once the first 1,250 taxis have been delicensed under the enhanced scheme there will still be payments available of between £9,000 and £6,000. In addition, delicensing payments of £1,000 will be made available to 1,000 taxi vehicle owners who have taxis which are 13 or 14 years old. A new LPG conversion grant will also be available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p>

3	Will impact people nearing retirement/force early retirement	<p>We are proposing that Euro 6 and ZEC taxis retain a 15 year age limit and this plus the phased reduction of the age limits means that not all drivers nearing retirement will be affected by the proposals.</p> <p>Owners who are impacted have the options to apply for a delicensing payment, sell their vehicle, rent another vehicle, buy a younger vehicle, convert a Euro 5 vehicle to Liquid Petroleum Gas (LPG) or retire from the trade. The drivers who are likely to be most severely affected are those who do low annual mileage or work fewer hours and may therefore not be able to rent or buy a newer vehicle; although drivers of Euro 5 vehicles will also be able to apply for part funding for an LPG conversion to extend the life of their existing vehicle, allowing it to operate for 15 years.</p>
4	Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric)	<p>The Government already offers grants for purpose-built taxis that have CO₂ emissions of less than 50 g/km and can travel at least 70 miles with zero emissions, and we are providing additional funding to top up the Government's grant to support London taxi drivers who want to purchase a ZEC taxi.</p> <p>We are proposing to introduce a new LPG conversion grant for a limited number of Euro 5 taxis. We are also proposing that ZEC taxis and newly converted LPG taxis retain a 15 year age limit.</p>
5	All taxis should pay congestion charge including (ZEC/LPG/electric)	<p>Taxis are exempt from the Congestion Charge and this is due to the way they are regulated and the role they play in providing an accessible door to door service in the Capital.</p> <p>Requiring taxis to pay the Congestion Charge was not proposed in this consultation. The primary aims of the Congestion Charge are to reduce traffic and congestion in central London. It is considered that taxis and wheelchair accessible PHVs should be exempt from the Congestion Charge to reflect their importance in providing accessible journeys in the CCZ.</p>

6	All taxis should pay ULEZ charge (ZEC/LPG/electric)	Requiring taxis to pay the ULEZ charge was one of the options initially considered but after careful consideration this was not taken forward. The reason for this is that this option would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge, limiting the impact on emissions.
7	There will be a negative Impacts on value/re-sale value of taxis	The newly structured delicensing scheme provides payment for owners of vehicles to remove them from the fleet and reinvest in younger vehicles. Whilst it is correct that the value of older second hand vehicles is likely to go down it is also possible that younger second hand vehicles will increase in value. The uptake of the new zero emission capable taxi continues to grow steadily, currently standing at nearly 1,500 vehicles.
8	Reduce the cost of the new taxis (ZEC/LPG/electric)	We are not able to reduce or set the cost of ZEC taxis or LPG conversions. However, the Government already offers grants for purpose-built taxis that have CO ₂ emissions of less than 50 g/km and can travel at least 70 miles with zero emissions and we are providing additional funding to top up the Government's grant to support London taxi drivers who want to purchase a ZEC taxi. We are also proposing to introduce a new LPG conversion grant for a limited number of Euro 5 taxis.
9	Allow more time for age limit transition	We have proposed that a new age limit for taxis should be introduced over a phased period of time from 1 November 2020 with the maximum taxi age limit reduced to 12 years by 2022 for Euro 3, 4 and 5 taxis. We've not proposed a longer period for the transition to a lower age limit as by law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. That expectation will not be met, hence the need for further action.
10	Allow natural wastage of taxis/taxi fleet	We are proposing to retain a 15 year age limit for Euro 6, ZEC and newly converted LPG taxis. However, action needs to be taken to reduce NOx emissions from taxis and this is the reason for proposing a reduced age limit for those taxis which have the highest NOx emissions.

		<p>Taxis contribute 25 per cent of NOx road transport emissions in central London and will be the largest source of road transport NOx in central London (we estimate this figure is now more like 30% due to improvements across the rest of the fleet).</p> <p>This will increase even further if we do not improve the rate at which the taxi fleet is cleaned up. If we are to meet the UK's legal commitments then we must reduce NOx emissions from taxis in central London by 65 per cent by 2025 (based on 2013 levels), amongst other requirements.</p> <p>This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p>
11	Keep maximum age of taxis at 15 years old	see response #10
12	Reduce age limit of taxis sooner	<p>Reducing taxi age limits at a quicker rate (e.g. a blanket 12 year age limit operable from 2020) was one of the options initially considered. However, this pace of change was considered to be unreasonably onerous for the taxi trade given the time period and potential economic impact.</p> <p>The proposed phased approach, with the age limit reduced to 12 rather than 10 years for Euro 3, 4 and 5 taxis, was considered to be proportionate whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>
13	Reduce age limit of taxis to 10 years/Same as PHVs	see response #12

14	The proposals are unfair and change the goalposts on maximum age limit	<p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p> <p>We stated in 2015 that a formal policy review of the taxi fleet would be undertaken by TfL in early 2020 to gauge progress on both the voluntary delicensing scheme to remove 10 years-old-plus vehicles and the uptake of the new ZEC taxis. However, it became clear that the uptake of the decommissioning grants was lower than anticipated and that the target of 9,000 ZEC taxis by 2020 would not be met. Therefore we brought forward the plans to review the taxi vehicle licensing requirements and at the same time we have significantly enhanced the taxi delicensing scheme.</p> <p>The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions will be achieved.</p>
15	No age limit for electric taxis	We're proposing that a 15 year age limit is retained for ZEC taxis however; we are not proposing to remove the age limit completely for any taxis. Maintaining taxi age limits increases the prevalence of vehicles with modern safety features as standard. The latest ZEC taxis, for example, come with Autonomous Emergency Braking for people walking and cycling, lane-departure and forward collision warning systems.
16	All taxis should be electric	<p>Since 1 January 2018 all newly licensed taxis must be ZEC however, we're not proposing that all licensed taxis must be fully electric.</p> <p>We're supporting taxi drivers to make the transition from diesel to ZEC taxis by offering grants, which are in addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet and speed up the transition to a fully ZEC taxi fleet.</p>
17	All taxis should be Euro 6 vehicles	Since 1 January 2018 all newly licensed taxis must be ZEC and there are already around 1,600 licensed ZEC taxis. Our aim is to move away from diesel taxis and eventually for the entire taxi fleet to be ZEC.

18	All taxis should be hybrids	<p>Since 1 January 2018 all newly licensed taxis must be ZEC however, we're not proposing that all licensed taxis must be hybrids.</p> <p>We're supporting taxi drivers to make the transition from diesel to ZEC taxis by offering grants, which are in addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet and speed up the transition to a fully ZEC taxi fleet.</p>
19	All taxis should be ZEC (zero emission capable)	<p>Since 1 January 2018 all newly licensed taxis must be ZEC but we are not proposing that all licensed taxis should be ZEC immediately.</p> <p>We're supporting taxi drivers to make the transition from diesel to ZEC taxis by offering grants, which are addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet.</p>
20	Need more choice of new taxis	<p>We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London.</p> <p>We're expecting that the Dynamo taxi will be available from summer 2019 and this will mean that taxi drivers have the choice of a full electric vehicle or a range extended electric vehicle.</p>
21	Retrofit technology to capture emission	<p>There is no approved retrofit currently available and it is expected that it would be approximately 12 months before a retrofit solution is approved, nationally accredited with conversion centres up and running and ready to convert vehicles at scale. However we welcome suggestions from all stakeholders including the taxi trade to find other ways to reduce taxi emissions, and if a Euro 6 retrofit is developed, tested and approved in future, will consider ways to incorporate retrofitted Euro 5 taxis in the new Conditions of Fitness and age limits.</p> <p>We are offering a grant to Euro 5 taxi drivers who wish to convert their vehicle to LPG. This provides drivers with £5,000 towards the cost of converting their vehicle.</p>

22	Reduce amount of taxis (empty/plying for hire)	<p>Taxi ranks provide a designated space exclusively for taxis to park and wait to be hired and can help reduce emissions from taxis as they avoid the need for drivers to drive around and wait to be hailed on the street.</p> <p>In our Taxi Rank Action Plan^[1] we committed to increasing the number of taxi ranks by 20 per cent by 2020. We've already met this target but continue to consider requests for new taxi ranks so as the Capital's taxi rank network can be expanded.</p> <p>Any suggestions for new taxi ranks can be emailed to tphranksinterchange@tfl.gov.uk for consideration.</p>
23	Reduce/Cancel license of/all high emission/taxis/vehicles	<p>We are not proposing to revoke the licence of all taxis which are not Euro 6, ZEC or LPG as we feel this would have an unacceptable adverse impact on taxi drivers and taxi users. Instead we've proposed a phased reduction of the age limit for the most polluting taxis as we think this is a more proportionate approach which still tackles emissions and helps us reach our 2025 target. The phased approach also gives drivers more time to adapt to the change in age limit.</p>
24	Stop taxis from idling	<p>We have already run anti-idling campaigns which have included activities specifically targeting taxis and also publish guidance to taxi and private hire drivers advising them to avoid unnecessary engine idling.</p> <p>London boroughs have powers to take action against drivers who refuse to switch their engine off when idling and some boroughs have had campaigns encouraging drivers to avoid unnecessary engine idling.</p> <p>Westminster City Council are currently running a campaign to reduce engine idling (#Don'tBeldle). Mytaxi has recently signed up to this campaign and is encouraging taxi drivers to turn off their engines when on taxi ranks or waiting to pick up a passenger.</p>
25	Allow taxis to use bus lanes	<p>Taxis can already access the majority of bus lanes in the Capital.</p>
26	Taxis shouldn't use bus lanes	<p>Use of bus lanes is vital in helping taxis move around the Capital however, access will only be granted where it is safe to do so and bus operations will not be negatively affected.</p>

^[1] TfL Taxi Ranks Action Plan 2015, <http://content.tfl.gov.uk/tfl-ranks-action-plan.pdf>

27	TfL should enforce proper tests/spot checks/MOT's for taxis	All taxis are required to pass an annual licensing inspection and have two MOTs a year plus we have a dedicated team of Taxi and Private Hire Compliance Officers who carry out on-street checks of taxis. Between 1 May 2018 and 30 April 2019 our Compliance Officers carried out 9,203 taxi driver checks (85 per cent of drivers were compliant) and 9,382 taxi vehicle checks (75 per cent of taxis were compliant).
28	Reduce the number of PHVs	<p>We currently do not have the power to restrict or reduce the number of licensed PHVs and a change in the law would be required in order for us to obtain such powers. The Mayor's Transport Strategy states that the Mayor, through TfL, will seek "powers to limit the overall number of private hire vehicles licensed for use in London so as to manage their contribution to overall congestion, particularly in central London." In August 2018, the Mayor wrote to the Department for Transport (DfT) urging the Government to grant us powers to cap the number of PHVs, alongside appropriate restrictions on cross-border hiring.</p> <p>The DfT's Task and Finish Group report includes a recommendation for Government to provide licensing authorities with appropriate powers to set a cap on the number of taxis and PHVs licensed. In its response to the report the Government said it did not propose to take this recommendation forward and instead they would wish to see local authorities make the most use of existing powers to address air quality and congestion issues. However, we will continue to request that we are given powers to limit the number of taxi and PHV licences.</p>
29	The proposals are unfair as puts pressure on PHV industry	These proposals are concerned with reducing the age limits for taxis and not PHVs. We are tackling emissions from PHVs through other mechanisms.
30	Cycle lanes/super highways cause traffic/congestion	This is not directly related to the proposals.

31	Encourage active forms of transport (walking, cycling)	<p>The Mayor's Transport Strategy already contains a policy that "The Mayor, through TfL and the boroughs, and working with stakeholders, will reduce Londoners' dependency on cars in favour of active, efficient and sustainable modes of travel, with the central aim for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041".</p> <p>We already use the Healthy Streets Approach to plan our streets and transport networks and this encourages the use of active, efficient and sustainable modes of travel.</p>
32	PHVs cause traffic/congestion	The Mayor's Transport Strategy (MTS) recognises that PHVs contribute towards increasing congestion, particularly in central London. On 8 April, following a full public consultation, the PHV exemption from the Congestion Charge was removed.
33	Reduce traffic/congestion by keeping roads open	This is not directly related to the proposals.
34	TfL/road schemes/projects contribute to traffic/congestion	This is not directly related to the proposals.
35	Fix emissions standard/test for all vehicles regardless of age	The emissions standards of taxis will vary with age as the general vehicle emissions standards have become tighter over time. Within London's taxi fleet we have Euro 3, 4, 5 and 6 diesel taxis plus LPG and ZEC taxis. We're proposing to retain a 15 year age limit for Euro 6, ZEC and LPG taxis but reduce the age limit for Euro 3, 4 and 5 taxis as these contribute the most towards pollution and NOx emissions.
36	Government told us to buy diesel	As TfL's understanding of the health impacts of poor air quality has improved there has been a shift in emphasis by the EU, national government and regional government towards policies which reduce emissions of the most harmful urban pollutants - NOx and PM.
37	Proposals coming in too quickly	We estimate that taxis currently contribute a quarter of all harmful road transport NOx emissions in central London. This is expected to increase further, and by 2020 taxis are likely to be the biggest source of road transport NOx emissions if we do not take additional urgent action to clean the fleet. We propose a phased reduction of the age limit rather than an immediate reduction to 12 years to mitigate the impact on owners and drivers.

38	Suburban drivers can't afford what is being proposed	We do not have any evidence that the proposals will have any greater effect on 'suburban' licensed drivers compared to 'all london' license holders. If suburban drivers do tend to have older vehicles (as suggested in some of the consultation responses) then they will be affected earlier than drivers of younger vehicles.
39	Proposals mean drivers will keep vehicle for age limit and not trade in for a new ZEC (due to reduced second hand values)	The newly structured delicensing scheme provides payment for owners of vehicles to remove them from the fleet and reinvest in younger vehicles. The uptake of the new zero emission capable taxi continues to grow steadily, currently standing at around 1,600 vehicles.
40	Rental costs will increase	TfL is optimistic that rental costs will not be substantially affected by these proposals. Options for affected drivers are set out in section 1.4 of this report.
41	Small tax for drivers to keep delicensing scheme going	TfL does not believe that imposing any additional charges on drivers would be beneficial for the trade.
42	Make new Euro 6 vehicles available for sale again	<p>TfL believes that permitting new Euro 6 vehicles to be licensed would be a retrograde step, and would threaten the improvements already made in the taxi fleet's emissions. We estimate that taxis currently contribute a quarter of all harmful road transport NOx emissions in central London. By 2020 taxis are likely to be the biggest source of road transport NOx emissions if we do not take additional action to clean up the fleet.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. Making new Euro 6 vehicles available again would not support this legal requirement.</p> <p>In order to support this we are continuing to provide funding to support taxi drivers who wish to purchase a ZEC taxi plus our taxi delicensing scheme has been significantly enhanced. A new LPG conversion grant will also be available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p>
43	Embodied carbon of maintaining new vehicle	Whilst we acknowledge that the energy required to manufacture new taxis will result in carbon emissions. These proposals have been developed in order to meet legal requirements for NOx emissions by 2025 and as a result focus on removing the most polluting vehicles from the fleet.

44	Control number of taxis in LEZ	The ULEZ and LEZ are set up to restrict the access of vehicles by type not number of vehicles. There is no system in place to limit the number of taxis entering the zone, it would also be likely to be difficult to administer e.g. if a taxi picks up a passenger outside the zone who wants to go inside it.
45	Subsidy for pedal taxi schemes	The Mayor's Transport Strategy notes that regulations regarding the use of pedicabs in London are required to ensure the safety and security of passengers and other users, and to reduce the impact they have on congestion.
46	It's too simplistic to base on euro standards – how often and quality of servicing has more of a bearing on emissions	All taxis are required to pass an annual licensing inspection and have two MOTs a year and no change to these requirements is proposed.
47	Limit taxis by time of day	see response #44

5.3 Responses to issues raised in Question 4: Views about whether it is right for Euro 6, LPG and ZEC taxis to have a 15 year age limit

48	There should be no age limit for taxis that pass required tests/safety checks	All taxis must pass an annual licensing inspection and have two MOTs each year however, we are not proposing to remove the age limit completely for any licensed taxis. Maintaining taxi age limits increases the prevalence of vehicles with modern safety features as standard – the latest ZEC taxis, for example, come with Autonomous Emergency Braking for people walking and cycling, lane-departure and forward collision warning systems.
49	There should be no age limit (ZEC/LPG/electric)	see response #15
50	All taxi/engine types should have same age limit	The emissions standards of diesel taxis will vary with age as the general vehicle emissions standards have become tighter over time. Within London's taxi fleet we have Euro 3, 4, 5 and 6 diesel taxis plus LPG and ZEC taxis. We're proposing to retain a 15 year age limit for Euro 6, ZEC and LPG taxis but reduce the age limit for Euro 3, 4 and 5 taxis as these contribute the most towards pollution and NOx emissions. We're linking the age limits to the emissions standard as this helps achieve the required reduction in emissions and targets action at the most polluting vehicles. It also recognises the financial investment that owners of the newest taxis have made in their vehicle.

51	taxis should have same age limit as PHVs (ZEC/LPG/electric)	<p>Reducing taxi age limits at a quicker rate (e.g. a blanket 12 year age limit operable from 2020) was one of the options initially considered. However, this pace of change was considered to be unreasonably onerous for the taxi trade given the time period and potential economic impact on them.</p> <p>The proposed phased approach, with the age limit reduced to 12 rather than 10 years for Euro 3, 4 and 5 taxis, was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>
52	All taxis should have a lower age limit (10/12 years)	see response #12
53	All taxis should have an extended age limit (12/20 years)	<p>We estimate that taxis currently contribute around a quarter of all harmful road transport NOx emissions in central London. This is expected to increase further, and by 2020 taxis are likely to be the biggest source of road transport NOx emissions if we do not take additional action to clean the fleet. Taxis also currently produce 33 kilotonnes of Carbon Dioxide and 2.8 tonnes of harmful PM10 emissions</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with a target of 9,000 zero emission capable taxis by 2020.</p> <p>Extending the taxi age limit would mean that we would not achieve the necessary reduction in emissions from taxis required for us to achieve air quality compliance by 2025. Furthermore we are not proposing to extend the age limit for any licensed taxis as maintaining appropriate taxi age limits increases the prevalence of vehicles with modern safety features as standard – the latest ZEC taxis, for example, come with Autonomous Emergency Braking for people walking and cycling, lane-departure and forward collision warning systems.</p>
54	Allow natural wastage of taxis/taxi fleet	see response #10

55	The age limit should be 10 years (ZEC/LPG/electric)	<p>On balance, we consider that reducing the age limit for certain taxis is the right approach as this helps us achieve the air quality improvements that London needs by removing the oldest vehicles from the fleet as well as providing the taxi trade with time to prepare for the changes and make vehicle purchasing and delicensing choices in the knowledge of future changes.</p> <p>The proposed phased approach, with the age limit reduced to 12 rather than 10 years for Euro 3, 4 and 5 taxis, was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>
56	The age limit should be 12 years (ZEC/LPG/electric)	<p>We've proposed a phased age limit reduction to 12 years for Euro 3, 4 and 5 taxis only in recognition of these being the most polluting vehicles and the ones that need to have a lower age limit in order for us to achieve the necessary reduction in emissions.</p>
57	The age limit should be 20 years (ZEC/LPG/electric)	<p>We've not proposed a higher age limit for ZEC or newly converted taxis as we think that 15 years is a reasonable age limit for these vehicles. Furthermore it is important to maintain a reasonable age limit as this helps ensure that vehicles used as taxis develop and improve and it increases the prevalence of vehicles with modern safety features as standard.</p>
58	The age limit should be 5 years (ZEC/LPG/electric)	<p>On balance, we consider that reducing the age limit for certain taxis is the right approach as this helps us achieve the air quality improvements that London needs by removing the oldest vehicles from the fleet as well as providing the taxi trade with time to prepare for the changes and make vehicle purchasing and delicensing choices in the knowledge of future changes.</p> <p>We've proposed a phased reduction in the age limit for certain taxis to 12 years, rather than 5 years, as this still helps us achieve the necessary reduction in emissions from taxis but is not considered too onerous on taxi drivers and vehicle owners.</p>
59	The age limit should remain 15 years (ZEC/LPG/electric)	<p>We are proposing to retain a 15 year age limit for ZEC and newly converted LPG taxis.</p>

60	It is unfair to change goalposts/maximum age limit	<p>We are proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit and the only proposal that would affect the owners of these taxis is the proposal to mandate the maximum taxi operating age.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels).</p> <p>We stated in 2015 that a formal policy review of the taxi fleet would be undertaken by TfL in early 2020 to gauge progress on both the voluntary delicensing scheme to remove 10 years-old-plus vehicles and the uptake of the new ZEC taxis. However, it became clear that the uptake of the decommissioning grants was lower than anticipated and that the target of there being 9,000 ZEC taxis by 2020 would not be met. Therefore we brought forward the plans to review the taxi vehicle licensing requirements and at the same time we have significantly enhanced the taxi delicensing scheme.</p> <p>The proposed phased approach was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing a greater degree of certainty that the required reduction in emissions will be achieved.</p>
61	The proposals will cause higher unemployment rate/job loss (drivers/owners/trade)	see response #2
62	The proposals will create financial hardship (drivers/owners/trade)	see response #2

63	The proposals will create hardship (drivers/owners/trade)	see response #2
64	The proposals will create hardships for passengers	see response #1
65	The proposals will impact people nearing retirement/force early retirement	see response #3
66	taxis should pay congestion charge (ZEC/LPG/electric)	see response #5
67	taxis should pay ULEZ charge (ZEC/LPG/electric)	see response #6
68	Charge taxis according to amount of emissions they pollute	<p>Our core proposal is to reduce the maximum age limit for Euro 3, 4 and 5 taxis to 12 years by 2022 rather than introduce charging for taxis based on emissions standards.</p> <p>We did examine requiring taxis to pay the ULEZ charge but after careful consideration this was not taken forward. The reason for this is that it would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge.</p>
69	Fuel conversion to taxis are expensive to make	No change is proposed to the age limit for LPG taxis where the vehicle owner has already funded the conversion. We are proposing to remove the age limit extension for future LPG conversions but at the same time we are proposing to introduce a new LPG conversion grant to support taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.
70	The proposals Impact on value/re-sale value of taxis	We are proposing to retain a 15 year age limit for Euro 6, ZEC and newly converted LPG taxis. The re-sale value of some older taxis may be negatively impacted but we have significantly enhanced our delicensing scheme to support taxi vehicle owners. The new scheme now with top payments of £10,000 – double what the highest payment was under the previous scheme – available to the first 1,250 taxi owners. Once the first 1,250 taxis have been delicensed under the enhanced scheme there will still be payments available of between £9,000 and £6,000. In addition to this delicensing payments of £1,000 will be made available to 1,000 taxi vehicle owners who have taxis which are 13 or 14 years old.
71	taxis are too expensive to have a maximum age limit (ZEC/LPG/electric)	We're proposing that a 15 year age limit is retained for ZEC taxis and newly converted LPG taxis however; we are not proposing to remove the age limit completely for any taxis. Maintaining taxi and vehicle age limits increases the prevalence of vehicles with modern safety features as standard – the latest ZEC taxis, for example, come with Autonomous Emergency Braking for people walking and cycling, lane-departure and forward collision warning systems.

72	taxis are expensive to upkeep/maintain (repairs/new batteries/insurance)	TfL is responsible for the regulation of taxi fares and tariffs. These are normally reviewed annually with any proposed changes subject to a public consultation. When reviewing taxi fares and tariffs we take into consideration the cost of taxi vehicles plus other costs associated with being a taxi driver in London including vehicle servicing, parts and insurance.
73	There needs to be more alternative fuel source vehicle usage (electric/hybrid/LPG)	Our primary focus is on the taxi fleet moving towards using ZEC vehicles however, LPG conversions systems for taxis have already been approved by TfL and we are proposing to introduce a new grant to support converting a limited number of Euro 5 taxis to LPG.
74	Need more choice of taxi so there is no monopoly	We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London. We're expecting that the Dynamo taxi will be available from summer 2019. This will mean that taxi drivers have the choice of a full electric vehicle or a range extended electric vehicle.
75	Buses contribute more to pollution/air quality problems more than taxis	<p>Buses provide a vital alternative mode to the private car in central London and are an efficient and sustainable mode of transport. All TfL buses operating in the ULEZ in central London meet or exceed Euro VI emission standards and our growing fleet of greener buses now includes over 150 electric buses. From 2020, all new single deck buses entering the fleet will be zero emission at tailpipe, contributing to improving air quality. We are also introducing Low Emission Bus Zones across London where all scheduled TfL buses travelling within the zone will need to meet or exceed the latest Euro VI emissions standards.</p> <p>The below diagram shows the relative emissions of Euro V and VI buses and Euro 5 and 6 taxis.</p>

		<p>The diagram illustrates the difference in exhaust emissions between older and newer vehicle standards. On the left, a red double-decker bus labeled 'Euro V bus' is shown with a large, dark grey cloud of exhaust coming from its tailpipe. To its right is a black car labeled 'Euro 5 taxi' with a smaller cloud. On the right side of the diagram, a red double-decker bus labeled 'Euro VI bus' is shown with a significantly smaller cloud of exhaust. To its right is a black car labeled 'Euro 6 taxi' with the smallest cloud of exhaust, demonstrating that newer Euro standards result in lower emissions.</p>
76	Stop/Eliminate all vehicles from idling	<p>We have already run anti-idling campaigns which have included activities specifically targeting taxis and also publish guidance to taxi and private hire drivers advising them to avoid unnecessary engine idling.</p> <p>London boroughs have powers to take action against drivers who refuse to switch their engine off when idling and some boroughs have had campaigns encouraging drivers to avoid unnecessary engine idling. Westminster City Council are currently running a campaign to reduce engine idling (#Don'tBeldle). Mytaxi has recently signed up to the campaign and is encouraging taxi drivers to turn off their engines when on taxi ranks or waiting to pick up a passenger.</p>
77	Allow retrofitting/modifications to taxis	see response #21
78	Use advance technology in manufacturing of taxis	<p>LEVC has built a new factory which is the first in the UK to be for the production of electric vehicles only and they have created a short film which provides a behind the scenes tour of this facility. We continue to work with vehicle manufacturers and support them so as new vehicles can be used as taxis in London.</p>

79	Scrap age limit for zec / lpg	see response #15
80	Not enough euro 6's – allow them to be licensed outside of London	<p>Around one fifth of the taxis licensed in London are Euro 6 and we're proposing that these can continue to be licensed and retain a 15 year age limit. Since 1 January 2018 all newly licensed taxis must be ZEC and we're not proposing to allow new Euro 6 taxis to be licensed for use in London. By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. We're expecting that the Dynamo taxi will be available from summer 2019 and this will cost less than the LEVC taxi.</p>

5.4 Responses to issues raised in Question 5: Additional impacts that should be borne in mind with regard to exemption removals

81	The proposals will cause higher unemployment and job losses	There are no taxis which are eligible for the historic and classic/niche exemption so we do not consider that the removal of this exemption would cause higher unemployment or job losses. We're proposing that LPG taxis which have already been granted an age limit extension will retain this and that a new LPG conversion grant is introduced which would fund around half the cost of a LPG conversion, with newly converted LPG taxis retaining a 15 year age limit. We are proposing to remove the hardship exemption but the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.
82	Passengers will have a harder time finding taxis/less on roads	The impact on passengers caused by a reduction in available taxis as a result of the removal of these exemptions is considered to be low. The reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption. We're proposing that LPG taxis which have already been granted an age limit extension will retain this and that a new LPG conversion grant is introduced which would fund around half the cost of a LPG conversion, with newly converted LPG taxis retaining a 15 year age limit. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.
83	Will create financial hardships for drivers and taxi owners	The financial/hardship impact on taxi drivers and vehicle owners as a result of the removal of these exemptions is considered to be low. The reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption and we're proposing that LPG taxis which have already been granted an age limit extension will retain this. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.
84	The proposals will create hardship for garages/Put garages out of business	The impact on garages as a result of the removal of these exemptions is considered to be low. There reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption and we're proposing that LPG taxis which have already been granted an age limit extension will retain this. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.

85	The proposals will impact people nearing retirement/force early retirement	<p>The impact on taxi drivers nearing retirement as a result of the removal of these exemptions is considered to be low. The reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption and we're proposing that LPG taxis which have already been granted an age limit extension will retain this. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.</p> <p>Taxi drivers nearing retirement will have options available to them if they wish to continue working as a taxi driver. Some drivers nearing retirement may have a taxi which is not affected by the proposals or have a taxi that can continue to be licensed for the time they wish to continue working as a taxi driver.</p> <p>Owners who are impacted have the options to apply for a delicensing payment, sell their vehicle, rent another vehicle, buy a younger vehicle, convert a Euro 5 vehicle to Liquid Petroleum Gas (LPG) or retire from the trade. The drivers who are likely to be most severely affected are those who do low annual mileage or work fewer hours and may therefore not be able to rent or buy a newer vehicle; although drivers of Euro 5 vehicles will also be able to apply for part funding for an LPG conversion to extend the life of their existing vehicle, allowing it to operate for 15 years.</p> <p>Other taxi drivers nearing retirement may not wish to purchase a new or second hand taxi but they can consider renting a taxi or sharing a taxi with another driver.</p>
86	The proposals will create hardship for part time/less mileage drivers	<p>The impact on taxi drivers who work part time or fewer hours/drive less as a result of the removal of these exemptions is considered to be low. The reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption and we're proposing that LPG taxis which have already been granted an age limit extension will retain this. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low and these are only valid for one year.</p> <p>Some taxi drivers who work part time or fewer hours/drive less may have a taxi which is not affected by the proposals or have a taxi that can continue to be licensed for the time being. Taxi drivers who work part time or fewer hours/drive less may not wish to purchase a new or second hand taxi but they can consider renting a taxi or sharing a taxi with another driver.</p>

87	There should be an offer of assistance for grants/subsidy to taxis to help with (ZEC/LPG/electric) vehicles	<p>Grants are already available to support taxi drivers who wish to purchase a ZEC taxi and it is proposed that ZEC taxis will retain a 15 year age limit.</p> <p>A new LPG conversion grant will also be available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p>
88	taxis are too expensive to buy/rent (ZEC/LPG/electric)	<p>Grants are available to support taxi drivers who wish to purchase a ZEC taxi and it is proposed that ZEC taxis will retain a 15 year age limit.</p> <p>We are also proposing to introduce a new LPG conversion grant for Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p> <p>TfL is responsible for the regulation of taxi fares and tariffs. These are normally reviewed annually with any proposed changes subject to a public consultation. When reviewing taxi fares and tariffs we take into consideration the cost of taxi vehicles plus other costs associated with being a taxi driver in London including vehicle servicing, parts and insurance.</p>
89	Impacts on value/re-sale value (ZEC/LPG/electric)	<p>We consider that the removal of these exemptions will have a low impact on the value or re-sale value of ZEC or LPG taxis. There reasons for this are that there are no licensed taxis which are eligible for the historic and classic/niche exemption and we're proposing that LPG taxis which have already been granted an age limit extension will retain this. Furthermore the number of taxi age limit exemptions granted for hardship reasons is low, these are only valid for one year and the hardship exemption is only granted to individual taxi drivers cannot be transferred to other drivers. We are also proposing that ZEC taxis retain a 15 year age limit.</p>
90	PHVs contribute to traffic/congestion problems/more than taxis	<p>These proposals are concerned with helping to reduce emissions from the taxi fleet. Other initiatives are focused on reducing vehicles contribution to traffic and congestion. PHVs are now subject to the Congestion Charge recognising their contribution to traffic and congestion in central London.</p>

91	All vehicles should be converted to electric/ZEC	<p>Since 1 January 2018 all newly licensed taxis must be ZEC however, we're not proposing that all licensed taxis must be ZEC.</p> <p>We're supporting taxi drivers make the transition from diesel to ZEC taxis by offering grants, which are in addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet and speed up the transition to a fully ZEC taxi fleet.</p>
92	There should be more electric chargers/rapid chargers/free chargers/taxi only chargers	There are currently more than 150 rapid charge points across London, with some of these designated for use by taxis only, and we're committed to installing at least 300 by 2020. Most London boroughs are also continuing to expand their charging networks.
93	The batteries need a better range on the electric taxi	We expect the new Dynamo taxi to be available from summer 2019 and this will have a range of around 150 miles per full charge.
94	Cleaner fuel source such as LPG/Bio-fuels for taxis should be investigated	LPG retrofit technology exists and is proven to work and deliver significant emissions savings. As a result of this we are offering part funding of LPG conversions which enable owners to keep their vehicles on the road until 15 years old. We acknowledge the carbon savings that using recycled oil (e.g. used cooking oil) can achieve when used as part of a diesel blend. Bio-fuels can help to reduce CO2 emissions, although NOx emission benefits are less clear. As such, the use of bio-fuels is not a solution for the current NOx issues. In addition, there can be difficulties with the supply and storage of high-blend bio-fuels and we cannot control the choice of fuel made by taxi operators. We have previously had issues with the use of Bio-fuels in taxis and in PHVs. It is difficult to determine what fuels are being used and concerns have been raised by operators regarding negative impacts of different blends of bio-fuels. As above, we cannot control the choice of fuel made by taxi and PH operators.
95	Upgrade to euro 6/conversions available/retrofit/exhaust (euro 3,4,5 taxis)	see response #21
96	Allow more time for age limit transition	see response #9

97	It is unfair to change goalposts/age limit	<p>We are proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit and the only proposal that would affect the owners of these taxis is the proposal to mandate the maximum taxi operating age.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p> <p>We stated in 2015 that a formal policy review of the taxi fleet would be undertaken by TfL in early 2020 to gauge progress on both the voluntary delicensing scheme to remove 10 years-old-plus vehicles and the uptake of the new ZEC taxis . However, it became clear that the uptake of the decommissioning grants was lower than anticipated and that the target of there being 9,000 ZEC taxis by 2020 would not be met. Therefore we brought forward the plans to review the taxi vehicle licensing requirements and at the same time we have significantly enhanced the taxi delicensing scheme.</p> <p>The proposed phased approach was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>
98	The taxi age limit should remain at 15 years/not be changed at all	see response #10
99	Allow natural wastage of taxis/taxi fleet	see response #10

100	Historic and niche taxis not used regularly and are small in number	There are no taxis which are eligible for the historic and classic/niche exemption so we do not consider that the removal of this exemption would cause higher unemployment or job losses.
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5.5 Responses to issues raised in Question 6: Comments on Integrated Impact Assessment

101	The taxi age limit should remain at 15 years/not be changed at all	see response #10
102	Maximum age for taxis should be at 5 years for taxis	see response #58
103	taxis should have same age limit as PHVs (ZEC/LPG/electric)	see response #12
104	It is unfair to change goalposts/age limit	<p>We are proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit and the only proposal that would affect the owners of these taxis is the proposal to mandate the maximum taxi operating age.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p> <p>We stated in 2015 that a formal policy review of the taxi fleet would be undertaken by TfL in early 2020 to gauge progress on both the voluntary delicensing scheme to remove 10 years-old-plus vehicles and the uptake of the new ZEC taxis. However, it became clear that the uptake of the decommissioning grants was lower than anticipated and that the target of there being 9,000 ZEC taxis by 2020 would not be met. Therefore we brought forward the plans to review the taxi vehicle licensing requirements and at the same time we have significantly enhanced the taxi delicensing scheme.</p> <p>The proposed phased approach was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>

105	The proposals will cause higher unemployment rate/job loss (drivers/owners/trade)	<p>Our Integrated Impact Assessment identified some potential negative impacts on taxi drivers. These have been partly mitigated by proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit. There are a number of options available for other taxi drivers who are affected by the proposals, including selling or delicensing their current taxi and leasing a ZEC taxi, buying a replacement taxi, sharing a taxi or buying a second-hand taxi.</p> <p>TfL plus the Government are continuing to provide funding to support drivers who wish to purchase a ZEC taxi.</p> <p>To support taxi drivers our taxi delicensing scheme has been significantly enhanced with top payments of £10,000 – double what the highest payment was under the previous scheme – available to the first 1,250 taxi owners. Once the first 1,250 taxis have been delicensing under the enhanced scheme there are still payments available of between £9,000 and £6,000. In addition to this delicensing payments of £1,000 will be made available to 1,000 taxi vehicle owners who have taxis which are 13 or 14 years old. A new LPG conversion grant will also be available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p>
106	Passengers will have a harder time finding taxis/less on roads	see response #82
107	The proposals will create financial hardship (drivers/owners/trade)	see response #105
108	The proposals will create hardship (drivers/owners/trade)	see response #105
109	The proposals will create hardship for mechanics/put garages out of business	<p>Our Integrated Impact Assessment identified that the policies may result in a marginal negative impact on small businesses such as mechanics and garages, if the size of the taxi fleet reduces. It also identifies that there may also be a small benefit to second hand dealers and scrappage companies. It is possible that as the overall taxi fleet becomes younger, the level of servicing and repairs required will fall. We do not consider that we should retain a fleet of older taxis on the streets of London in order to provide work for garages and mechanics.</p>

110	The proposals will create stress/mental strain (drivers/owners)	<p>For the proposals we undertook an Integrated Impact Assessment (IIA). The IIA assessed the impact of the proposals on taxi drivers and owners. The IIA concluded that if drivers have to work longer hours to maintain a sufficient income then their stress or mental health may suffer. This is based on evidence that increased working hours can lead to stress or mental ill health. Concerns around maintaining their current level of income may also affect taxi fleet owners by potentially increasing stress.</p> <p>We are committed to supporting the trade to ensure that drivers can access appropriate mental health assistance and support. We are currently developing on line resources for drivers and engaging with a range of organisations who have specialist knowledge in mental health and wellbeing. Awareness of mental health issues is being raised through a continuing series of wellbeing articles in our 'On Route' magazine and the weekly email sent to licensees. We are planning to hold a seminar alongside senior industry representatives to explore and promote existing support for drivers.</p>
111	The proposals will impact people nearing retirement/force early retirement	see response #85
112	There should be an offer of assistance for grants/subsidy to taxis to help with (ZEC/LPG/electric) vehicles	We have also doubled the initially proposed £2.5 million fund to help owners of Euro 5 taxis to convert their taxis to LPG, which is a much cleaner fuel system. 1,000 owners of Euro 5 vehicles can now apply for a LPG conversion grant.
113	Assess/offer assistance/grants for conversion to euro 6 (euro 3,4,5 taxis)	see response #21
114	taxis should pay congestion charge (ZEC/LPG/electric)	see response #5
115	taxis are too expensive to buy (ZEC/LPG/electric)	see response #88
116	Impacts on value/re-sale value of taxis	see response #70
117	Unaffordable rent price for taxis (ZEC/electric)	We have set out the options / economic scenarios for affected taxi drivers at section 1.4.1 of this report. These highlight different options available to drivers taking into account a range of circumstances.
118	Buses contribute to pollution/air quality problems/more than taxis	see response #75
119	Reduce pollution by keeping roads open	This is not directly related to the proposals.

121	Reduce/ban buses/empty buses	Buses provide a vital mode of transport across London. They are an efficient and sustainable mode of transport. There is no intention to ban buses or reduce their numbers where they provide a vital service to Londoners.
122	Reduce/ban PHVs	We currently do not have the power to cap or restrict the number of licensed PHVs and a change in law is required in order for us to obtain such powers. In August 2018, the Mayor wrote to the Department for Transport (DfT) urging Government to grant us powers to cap the number of private hire vehicles, alongside appropriate restrictions on cross-border hiring. The DfT's Task and Finish Group report also includes a recommendation for Government to provide licensing authorities with appropriate powers. The Mayor's Transport Strategy states that the Mayor, through TfL, will seek "powers to limit the overall number of private hire vehicles licensed for use in London so as to manage their contribution to overall congestion, particularly in central London".
123	Reduce/ban taxis	London's taxis provide a trusted and reliable service to Londoners, tourists and business people from home and abroad. They offer customers a safe and convenient method of transport. Taxi services provide an accessible door to door service which may be essential for some users and the MTS recognises that taxis "can expand travel horizons for those requiring safe, accessible travel options. Taxis are particularly important for anyone who experiences physical or other barriers when accessing other forms of transport.
124	Reduce all euro 3,4,5 vehicles	We are planning to introduce a new age limit for taxis over a phased period of time from 1 November 2020. We propose that the maximum taxi age limit be reduced to 12 years by 2022 for Euro 3, 4 and 5 taxis.
125	All taxis should be electric/converted to electric	We've not proposing that all licensed taxis should be ZEC immediately but since 1 January 2018 all newly licensed taxis must be ZEC. We're supporting taxi drivers to make the transition from diesel to ZEC taxis by offering grants, which are in addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet.
126	More electric chargers/rapid chargers/free chargers/taxi only chargers	TfL will also continue its programme to install rapid charging infrastructure, which aims to accelerate the transition of London's taxi, private hire, and other commercial and private vehicles to Ultra-Low Emission Vehicles (ULEVs). TfL has delivered over

		<p>160 rapid charge points with 65 dedicated to taxis. There are plans to have delivered a total of 300 by the end of 2020. Future rapid charge points that are dedicated to ZEC taxis only will be focussed on central London and strategic routes. There are also other rapid chargers being installed in London outside of TfL's funding, as the total number of rapid chargers reported by Zapmap in December 2018 was 200. There are a further 2,200 charging units classed as fast, standard or slow, which are more suited to times when the electric vehicle can be stationary for a longer period of time.</p>
127	Cleaner fuel sources such as LPG/Bio-fuels should be investigated	see response #94
128	Upgrade to euro 6/conversions available/retrofit/exhaust (euro 3,4,5 taxis)	see response #21
129	There should be a strict vehicle testing regime/mots for taxis when licensed	see response #27
130	Stop/prevent all vehicles from idling	<p>We have already run anti-idling campaigns which have included activities specifically targeting taxis and also publish guidance to taxi and private hire drivers advising them to avoid unnecessary engine idling.</p> <p>London boroughs have powers to take action against drivers who refuse to switch their engine off when idling and some boroughs have had campaigns encouraging drivers to avoid unnecessary engine idling.</p> <p>Westminster City Council is currently running a campaign to reduce engine idling (#Don'tBeldle). Mytaxi has recently signed up to this campaign and is encouraging taxi drivers to turn off their engines when on taxi ranks or waiting to pick up a passenger.</p>

131	The proposals are biased/unfair/targets taxis/puts pressure on taxi trade	As part of the development of the proposals, we undertook an Integrated Impact Assessment (IIA), which assessed the impacts of the proposals. The IIA concluded that owners of Euro 2,3,4 and 5 taxis will all be affected, to differing extents, by the proposals to mandate the maximum operating age or phased age limit proposals. The IIA also suggested that fleet owners who own Euro 2, 3, 4 or 5 vehicles will also be impacted, to various degrees by these proposals. However they will be able to apply for delicensing payments unless or until limited by the state aid 'de minimis' limit of €200,000 euros.
132	The proposals are biased/unfair/targets phvs/puts pressure on phv industry	see response #29
133	This will create monopoly for taxis/black cabs/reduce competition	Taxis are subject to different regulatory rules than those which apply to PHVs. Black cabs are legally required to be wheelchair accessible. In addition to wheelchair accessibility, taxis are required by the Conditions of Fitness to provide a range of other accessibility features. Taxi drivers are compelled to accept any hiring within a six mile radius of Charing Cross of up to one hour in duration or 12 miles long (20 miles if the journey begins at Heathrow Airport). This means that taxi drivers plying for hire on street or on a designated taxi rank must accept a hire. Taxi drivers are also expected to take the shortest, most direct route to fulfil a hire. Taking a longer than necessary route, which leads to an increased fare, is an offence.
134	Unfair to reduce euro 5 engine vehicle	As shown in table 1 in the IIA Euro 5 taxis produce more NOx emissions per km than euro 3, 4 and 6 vehicles so it is essential that they are included in the proposals.
135	Proposal is a money making/revenue raising scheme	By law, the UK must reduce NOx and other harmful emissions as quickly as possible. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). TfL will not make any money out of the proposals.
136	Scrapping causes more harm	If delicensing does result in scrappage of vehicles, then as part of the IIA we have completed an assessment of scrappage capacity and found that there is sufficient capacity within London + see response #43.
137	Provide more choice of vehicles	We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London. We're expecting that the Dynamo taxi will be available from summer 2019 and this will mean that taxi drivers have the choice of a full electric vehicle or a range extended electric vehicle.

5.6 Responses to issues raised from stakeholders and other miscellaneous comments

138	No retrofit option available to Vito drivers – should get 15 years	There is currently no retrofit system capable of converting Mercedes Vito taxis to run on LPG. We welcome suggestions from all stakeholders including the taxi trade to find other ways to reduce taxi emissions, and if a Euro 6 retrofit is developed, tested and approved in future, will consider ways to incorporate retrofitted Euro 5 taxis in the new Conditions of Fitness and age limits.
139	More MOT tests and stricter checks would be very effective	see response #27
140	Proposals will reduce the wheelchair accessible fleet	Our Integrated Impact Assessment looked at this issue, and reported that should the proposals result in a reduction in the size of the taxi fleet then there may be a minor reduction in accessibility for London's transport, particularly for those who require wheelchair accessible vehicles, or vehicles with accessibility features.
141	Will be forced to rent a taxi	see response #40

142	Not enough range on TXe/ poor battery life/ always have to drive in petrol mode	We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London. We're expecting that the Dynamo taxi will be available from summer 2019 and this will mean that taxi drivers have the choice of a full electric vehicle or a range extended electric vehicle. Any specific issues with the TXe should be raised with LEVC.
143	The grant money isn't enough	The enhanced delicensing scheme now has top payments of £10,000 – double what the highest payment was under the previous scheme – available to the first 1,250 taxi owners. Once the first 1,250 taxis have been delicensed under the enhanced scheme there will still be payments available of between £9,000 and £6,000.
144	Should charge taxi passengers (ULEZ / CC)	It is not proposed to remove the exemption from taxis to the Congestion Charge or the ULEZ at this time. In the case of the Congestion Charge, we do not consider it would be appropriate to pass on increased charges to passengers requiring short accessible (including wheelchair accessible) journeys in the Congestion Charging Zone.
145	No LPG conversion for Vitos	see response #138
146	Suggest that the maximum operating age limit should be only 10 years.	see response #12
147	Reduce idling, which affects our citizen's including taxi drivers' health .	see response #130

148	The 15 year age limit for Euro 6, LPG and ZEC taxis only considers tailpipe emissions and not Particulate Matter air pollution from brake and tyre wear. Therefore these vehicles should also be subject to a 10 year limit.	<p>We are proposing that there will be a 12 year age limit for taxis which are not ZEC, Euro 6 or new LPG conversions.</p> <p>Reducing taxi age limits at a quicker rate (e.g. a blanket 12 year age limit operable from 2020) was one of the options initially considered. However, this pace of change was considered to be unreasonably onerous for the taxi trade given the time period and potential economic impact on them.</p> <p>The proposed phased approach, with the age limit reduced to 12 rather than 10 years for Euro 3, 4 and 5 taxis, was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p> <p>See also response #203</p>
149	Reduce the hardship exemption from 12 months to 6 months.	<p>Although as part of this proposal we intend to remove the hardship/personal circumstances exemption currently in place, we will retain the general discretion to grant exemptions in circumstances where we consider it reasonable to do so. All applications for an exemption will be assessed on a case by case basis with consideration given to air quality and the legal commitment to reduce NOx and other harmful emissions as quickly as we can.</p>
150	Disabled drivers have special adapted vehicles which are expensive to replace. They suggest considering how our proposed measures may affect these drivers specifically, and consider potential exemptions or aids to ensure these drivers are not penalised.	<p>We already have an exemption in place for disabled taxi drivers who may require additional equipment to be fitted to their taxi or for significant adaptations to be made. We're not proposing any changes to this exemption and will continue to consider requests for this exemption from disabled taxi drivers on a case by case basis.</p>
151	More charging points or installing charging points that are capable of charging multiple vehicles at the same time are needed.	see response #126
152	Charging points are located in close proximity to rest ranks spaces for drivers to encourage use	TfL has already been delivering dedicated taxi rapid charging points at taxi rest ranks in Westminster and is working with other central London boroughs to deliver them elsewhere as well.

153	Ensuring that taxis are not exempt from any other/future charges such as ULEZ	Requiring taxis to pay the ULEZ charge was one of the options initially considered but after careful consideration this was not taken forward. The reason for this is that this option would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge, limiting the impact on emissions.
154	Taxis should be fitted with safety devices such as mandatory intelligent speed assistance	We are engaging with taxi manufacturers with a view to developing and installing this technology on new taxis models. These discussions are currently ongoing.
155	More charging points are needed for Electric taxis.	TfL will also continue its programme to install rapid charging infrastructure, which aims to accelerate the transition of London's taxi, private hire, and other commercial and private vehicles to Ultra-Low Emission Vehicles (ULEVs). TfL has delivered over 160 rapid charge points with 65 dedicated to taxis. There are plans to have delivered a total of 300 by the end of 2020. Future rapid charge points that are dedicated to ZEC taxis only will be focussed on central London and strategic routes. There are also other rapid chargers being installed in London outside of TfL's funding, as the total number of rapid chargers reported by Zapmap in December 2018 was 200. There are a further 2,200 charging units classed as fast, standard or slow, which are more suited to times when the electric vehicle can be stationary for a longer period of time.
156	Good reliable information should be provided (and promoted) to Taxi drivers of the long term health and Cost benefits of switching to Zero Emission electric vehicles.	There is a government campaign 'Go Ultra Low' (www.goultralow.com) which provides this at a national level. TfL is also promoting air quality awareness, in particular with the ULEZ but also to promote rapid charge points for taxis. There will be further promotion of the ZEC taxi and its benefits.
157	Euro 4.5 and 6 Taxis should have stop start technology to prevent idling.	We will consider any potential technology presented to us to help reduce emissions from taxis. Our focus is to improve air quality and transition the fleet away from diesel towards low emission vehicles.
158	All Taxis should be subject to real world (London driving) emissions tests, such as the Equa index.	By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. TfL's emissions calculations are based on COPERT factors, which are designed to reflect real-world emissions. We consider that the proposed phased age limit reductions for older diesel taxis are the best way of helping ensure compliance with the necessary emissions target, as opposed to introducing additional testing for individual taxis.

159	Financial support to be given to taxi drivers to switch vehicles will be required, and should be forthcoming. This could be funded by the ULEZ and CC revenue.	see response #4
160	An increase subsidy to convert to electric vehicles.	see response #4 + we have also recently significantly enhanced our taxi delicensing scheme for owners who wish to delicense their current vehicle.
161	Staged scale back 2020, 2021, 2022 is a more sensible proposal.	This comment has been noted.
162	TfL should look carefully at the LTDA concerns and review any plans accordingly.	<p>Air quality modelling indicates that we would not meet the 2025 target under the LTDA proposals and that Euro 6 conversion for Euro 5 taxis would not deliver the same level of air quality benefits as the age limit proposals.</p> <p>There is no approved retrofit currently available and it is expected that it would be approximately 12 months before a retrofit solution is approved, nationally accredited with conversion centres up and running and ready to convert vehicles at scale. However we welcome suggestions from all stakeholders including the taxi trade to find other ways to reduce taxi emissions, and if a Euro 6 retrofit is developed, tested and approved in future, will consider ways to incorporate retrofitted Euro 5 taxis in the new Conditions of Fitness and age limits.</p>
163	Clarify the rationale to holding the private hire industry to what appears to be a lower environmental standard.	see response #29
164	More evidence on the anticipated NOx reductions of the LPG scheme must be provided with an ongoing system to monitor emissions from converted vehicles.	<p>Before being approved for use on London taxis, an LPG conversion must demonstrate compliance with the latest type-approval emissions standards both on conversion and after an extensive period of durability mileage accumulation. This is the same testing as a new vehicle undergoes. All taxis are subject to MOT standard emissions checks annually to ensure in-service compliance.</p> <p>The approval process entails formal application with full technical details provided about the technology, emissions output and other installation details. The installation of the technology is approved by TfL; the technology is then emissions tested at a legislative emissions laboratory. The taxi then undergoes a durability trial of 10,000 miles (vehicle inspected periodically by TfL) operating in a real world taxi environment. At the end of the durability trial the taxi is then tested again at a legislative emission laboratory and if it passes the specific technology will be approved by TfL for that specific model of taxi.</p>

165	Information on the impact on particle and hydrocarbon emissions should also be provided and monitored.	We have provided information on the impact of particulate matter in the Integrated Impact Assessment.
166	Success of LPG conversions will also be dependent on the availability of refuelling facilities.	It should also be noted that in June 2019 Autogas, a supplier of LPG, informed us that 14 refuelling stations at Shell forecourt sites will not be renewed and will expect to be closed over the next two years. However we are in discussions with another provider who has committed to review any significant gaps these closures will create and develop plans to provide a service to enable continued supply in these areas if needed. At the current time, there are a total of 45 LPG refuelling stations in London.
167	Why not enforce 3 compliance tests or at least 3 emission tests per taxi & PHV over a certain age?	All taxis are required to pass an annual licensing inspection and have two MOTs a year and no change to these requirements is proposed. By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.
168	Any HP debt still remaining on vehicles needs to be considered.	We're proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit so taxi drivers and vehicle owners will still have the same length of time to repay any loans or financing arrangements. To support taxi drivers and vehicle owners make the transition from diesel to ZEC taxis we are offering grants, which are in addition to funding from the Government, for the purchase of ZEC taxis. We've also significantly enhanced our taxi delicensing scheme to help with removing the oldest taxis from the fleet and speed up the transition to a fully ZEC taxi fleet.
169	Was the owners made aware of the £500,000 grants to convert taxis to LPG?	The consultation materials on taxi age limits contained information about the new LPG grant scheme. It outlined that we have doubled the initially proposed £2.5 million fund to help owners of Euro 5 taxis to convert their taxis to LPG, which is a much cleaner fuel system. 1,000 owners of Euro 5 vehicles can now apply for a LPG conversion grant. Information on the new scheme is also available on our website and was communicated through press releases.

170	Did London actually apply for the LPG conversion grant?	We have doubled the initially proposed £2.5 million fund to help owners of Euro 5 taxis to convert their taxis to LPG, which is a much cleaner fuel system. 1,000 owners of Euro 5 vehicles can now apply for a LPG conversion grant. Independent testing shows that an average TX4 taxi emits over 70 per cent less NOx after being converted to run on LPG. Trials also show that drivers of LPG-converted taxis can save around £200 a month in fuel costs. We propose that a 15 year maximum age limit would apply to newly converted LPG taxis, so the fuel savings would enable taxi drivers to recoup the conversion costs while also reducing their contribution to damaging NOx emissions in London.
171	Grants to scrap Euro 3, 4 and 5 should immediately be introduced.	Our taxi delicensing scheme has been significantly enhanced. The new scheme now has top payments of £10,000 – double what the highest payment was under the previous scheme – available to the first 1,250 taxi owners. Once the first 1,250 taxis have been delicensed under the enhanced scheme there will still be payments available of between £9,000 and £6,000. In addition, delicensing payments of £1,000 will be made available to 1,000 taxi vehicle owners who have taxis which are 13 or 14 years old.
172	Outrageous that black cabs are exempt from the ULEZ charge.	see response #153
173	Age is not the appropriate criteria. The emissions of different generations of Euro is what's needed to replace age.	Vehicle age is considered to be a suitable proxy for the emissions of different Euro standard vehicles.
174	Outrageous that black cabs are exempt from the ULEZ charge.	see response #143

175	Why should LPG taxis have its life limited if it passes other relevant tests?	<p>We estimate that taxis currently contribute a quarter of all harmful road transport NOx emissions in central London. This is expected to increase further, and by 2020 taxis are likely to be the biggest source of road transport NOx emissions if we do not take additional action to clean the fleet. Taxis also currently produce 33 kilo tonnes of Carbon Dioxide and 2.8 tonnes of harmful PM10 emissions.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p> <p>This means that doing nothing to reduce emissions from taxis or allowing taxis to naturally reach the end of their operating life and leave the fleet is not an option. We are proposing that taxis which have already been converted to LPG and granted an age limit exemption will retain this. There are no licensed taxis which are eligible for the historic and classic/niche exemption so no taxi drivers or vehicle owners will be affected by this proposal. The number of taxi age limit exemptions granted for hardship reasons is low, these are only valid for one year but we are not proposing to remove or reduce any exemptions granted for hardship reasons.</p>
176	If there were more taxi parking areas reserved on the streets there would be less need for taxis to be driven around looking for passengers.	see response #22
177	Arrangements for taxis collecting passengers at airports and train stations could be designed to discourage long slowly moving queues of "black cabs" by allowing all vehicles collecting passengers reasonable time-limited access for the purpose.	We welcome ideas and suggestions for how we could improve taxi ranks and arrangements for taxis collecting passengers. Please email tphranksinterchange@tfl.gov.uk with any suggestions.
178	Scrap the proposed reduction in the 15 year age limit.	see response #10

179	Require all diesel and LPG taxis to be at least Euro VI or certified equivalent.	see response #17
180	TfL should allow funds from the taxi de-licensing scheme to pay for a certified retrofit to Euro VI or better for Euro V taxis.	see response #21
181	TfL should also work with other cities to ensure that these retrofitted taxis can be sold second hand to other cities.	Other cities are also developing emission standards however second-hand vehicles from London can be sold outside of London if they meet their required standards.
182	all taxis to be ZEC capable by 2025 or better i.e. electric.	see response #91
183	Make it easier for passengers to choose the cleanest taxis, if they wish, when hailing or booking them. This might be done by public education, apps, messaging to corporate account holders or introducing a German-type scheme whereby passengers can opt to choose the first ZEC taxi in a taxi queue (i.e. rather than a diesel or LPG taxi).	<p>There are already around 1,600 licensed ZEC taxis in London. We're providing additional funding to support drivers who wish to purchase a ZEC taxi to help increase the number on the Capital's streets and make it easier for the public to hail or book a ZEC taxi.</p> <p>We're also exploring whether certain taxi ranks could be designated as ZEC only taxi ranks and there has already been some stakeholder feedback that taxi users are choosing ZEC taxis instead of diesel taxis at ranks or when hailing on the street</p> <p>Gett's taxi booking app now includes a feature that allows users to request an electric taxi plus a separate feature where users can add 20 pence to their fare and this will be used to fund clean air projects.</p>
184	They would like to see the standards consistent for both the taxi trade and PH trade.	Taxis and PHVs have different licensing and regulatory requirements. We looked into the impact of including taxis in the ULEZ however requiring taxis to pay the ULEZ charge would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge, limiting the impact on emissions. Taxis are required by law to accept all journeys and to take the shortest route, which may involve multiple trips across the ULEZ daily.
185	They would like the original 15 age limit retained for LPG taxis.	We are proposing to retain a 15 year age limit for ZEC and newly converted LPG taxis.

186	Concerned that the LPG conversion extension has been reduced from 5 to 3 years. They consider the LPG extension to the age limit should be retained at 5 years so that both Taxi fleets and individual taxi owners are able to have a decent return on their LPG investment should they wish to convert.	We propose retaining a 15 year maximum age limit for taxis which have been newly converted to run on Liquid Petroleum Gas (LPG). In addition, taxis which were granted a five year extension to their age limit under the previous LPG conversion age limit exemption would not be affected. This five year extension will not apply to any newly converted taxis to LPG, however it is proposed that they be subject to a 15 year maximum age limit and not affected by the phased reduction in age limits.
187	Gastech is also concerned that they may only be able to sell their current Euro 6 LPG technology for their TX2 model until end of October 2019.	TX2 taxi models are now significantly older and suffering from the usual age degradation and performance issues associated with older vehicles. We are open to suggestions for retrofit solutions.
188	Need assurances that we can continue to sell this technology beyond this date due to the investments we already have in our production pipeline.	We are making 1000 payments of £5,000 available to owners of Euro 5 taxis who wish to convert their taxis to LPG. Currently, this proposal is not time limited.
189	Expand the £5000 grant per taxi to all taxi models.	A fund has also been created for an LPG conversion grant scheme. It opened to expressions of interest in January 2019 and is expected to launch in mid-2019. This will offer 1000 payments of £5,000 for Euro 5 taxis to convert to LPG, a far cleaner fuel source. Euro 5 taxis emit greater levels of NOx than Euro 3,4 or 6. There is currently no approved system for Euro 5 Vitos to be converted to LPG, however we will consider retrofit options for this model if they become available in the future.
190	Total ZEC vehicles should have a 20 year Limit due to the high capital outlay and the claimed high quality of this product.	see response #15
191	Offer a Driver retirement scheme or use of a Taxi pool of cleaner vehicles that is held in cooperative partnership with the Mayor.	<p>We are proposing that Euro 6 and ZEC taxis retain a 15 year age limit and this plus the phased reduction of the age limits means that not all drivers nearing retirement will be affected by the proposals.</p> <p>Owners who are impacted have the options to apply for a delicensing payment, sell their vehicle, rent another vehicle, buy a younger vehicle, convert a Euro 5 vehicle to Liquid Petroleum Gas (LPG) or retire from the trade. The drivers who are likely to be most severely affected are those who do low annual mileage or work fewer hours and may therefore not be able to rent or buy a newer vehicle; although drivers of Euro 5 vehicles will also be able to apply for part funding for an LPG conversion to extend the life of their existing vehicle, allowing it to operate for 15 years.</p>

192	As Vito taxis cannot be converted perhaps enhanced payments should be made to enable change.	We recognise that there is currently no retrofit solution available for Mercedes Vitos. We are open to suggestions for any new operating system.
193	TfL could run a competition to find a company to design a retrofit device capable of being fitted to taxi and van would of course create a chance for scientific and creative minds to perhaps come up with a possible option.	see response #21
194	Removing and congestion charge exemptions that taxis enjoy.	see response #5
195	Ensuring that taxis are not exempt from any other/future charges such as ULEZ.	Requiring taxis to pay the ULEZ charge was one of the options initially considered but after careful consideration this was not taken forward. The reason for this is that this option would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge, limiting the impact on emissions.
196	It is also vital that taxis are subject to other policies that are outlined in the MTS such as Vision Zero and that as soon as possible they are fitted with safety equipment.	The MTS states at proposal 78 that, "The Mayor, through TfL, will raise the safety standards for all customers travelling by taxi and private hire vehicles through effective and transparent regulation and enforcement." This aligns with the Vision Zero safe vehicles focus area to reduce the danger posed by motor vehicle journeys. Other focus areas are safe speeds, safe street design, safe behaviour and post collision.
197	Devices such as mandatory intelligent speed assistance.	see response #154
198	Taxi limit should be 10 years like PHV.	see response #12

199	Vehicles should be targeted based on their emissions rather than age.	<p>Our core proposal is to reduce the maximum age limit for Euro 3, 4 and 5 taxis to 12 years by 2022 rather than introduce charging for taxis based on emissions standards.</p> <p>We did examine requiring taxis to pay the ULEZ charge but after careful consideration this was not taken forward. The reason for this is that it would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge.</p>
200	Euro 5 taxis should be targeted first as your consultation document highlights that their emissions are higher than euro 3 and 4 taxis under real world testing conditions.	We are proposing a phased age limit reduction for Euro 3, 4 and 5 taxis as these are the most polluting taxis. In addition we are providing funding for LPG conversions for Euro 5 taxis.

201	Euro 6 non-ZEC vehicles should also be included in the phased approach as they have higher tailpipe emissions than the Euro 4 taxis which are being considered in the phased approach.	<p>We are proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit and the only proposal that would affect the owners of these taxis is the proposal to mandate the maximum taxi operating age. We are not including Euro 6 non-ZEC vehicles in the phased approach because these taxis are all relatively new and therefore any change to 15 year licensing would not take effect for many years in any event and would not make a significant contribution to meeting the 2025 target.</p> <p>By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p> <p>We stated in 2015 that a formal policy review of the taxi fleet would be undertaken by TfL in early 2020 to gauge progress on both the voluntary delicensing scheme to remove 10 years-old-plus vehicles and the uptake of the new ZEC taxis . However, it became clear that the uptake of the decommissioning grants was lower than anticipated and that the target of there being 9,000 ZEC taxis by 2020 would not be met. Therefore we brought forward the plans to review the taxi vehicle licensing requirements and at the same time we have significantly enhanced the taxi delicensing scheme.</p> <p>The proposed phased approach was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>
202	Additionally, a 15 year license on a Euro 6 taxi will conflict with the Mayor's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy).	The Mayor set out in his Mayor's Transport Strategy, published in 2018, that he will be implementing a Zero Emission Zone in central London by 2025. This is not defined in any further detail, so it is currently unknown what standards will be set or what vehicles will be affected. It will be kept under review.

203	Should also take into consideration brake and tyre wear which contribute to particulate levels which there is no safe exposure limit for.	The focus of the consultation was on NOx emissions, however we do also assess brake and tyre wear as part of our on-going air quality programme. We expect there to be benefits in reducing brake related emissions through ZEC taxis using regenerative braking, but other non-exhaust sources of PM are generally only thought to reduce when the mileage of vehicles is reduced. Where our policies result in some reduction in the fleet size and overall mileage of taxis then we would expect reduced emissions from these sources. Over time we will understand the uptake and replacement rate of taxis, including the new ZEC so we can understand the impact on fleet size. However, the consultation has focused on exhaust emissions. The Mayor does aim to meet World Health Organisation PM2.5 targets by 2030.
204	Euro LPG and ZEC taxis should have the same age limit as non ZEC and LPG taxis.	see response #50
205	Should re consult on the hardship exemption providing additional details of what would classify as an exemption and what can be done to tighten it to ensure it isn't taken advantage of.	see response #149
206	300 charge points by the end of 2020 is not enough to encourage drivers to switch.	TfL is putting in 300 by the end of 2020, but there are many independent rapid chargers also being installed in London, as well as slow to fast public chargers (3 - 22kwh). As of December 2018 there were 2,400 public charge point devices spread across London. Please check Zap-Map for the latest figures. TfL has just launched an Electric Vehicle Infrastructure Delivery Plan (June 2019) which details London's anticipated needs and how we will deliver these. The plan can be found at https://tfl.gov.uk/modes/driving/electric-vehicles-and-rapid-charging
207	TfL install rapid charging hubs which hold three charges per location.	TfL is already planning two rapid charging hubs and many more are anticipated in London. The first is likely to be in the City of London where a hub of 10 rapid charge points is being planned.
208	Consider replacing some taxi rest rank spaces in order to accommodate dedicated taxi only rapid charge points.	see response #152
209	Targets should be consistent with taxis and PHVs.	see response #184
210	Targets should be consistent with taxis and PHVs.	see response #184

211	Should target the most polluting vehicles first especially as diesel euro 5 has higher tailpipe emission as compared to diesel euro 3 and 4 and diesel euro 6 has higher tailpipe emissions as compared to diesel euro 4.	<p>We are proposing a phased age limit reduction for Euro 3, 4 and 5 taxis as these are the most polluting taxis. In addition we are providing funding for LPG conversions for Euro 5 taxis.</p> <p>Our proposals have been developed in order to improve air quality balanced against being unduly onerous on the taxi trade. For this reason we have not included euro 6 vehicles in the phased reduction of age limit.</p>
212	They consider that the 15 years age limit for ZEC and LPG is not ambitious enough.	see response #50
213	Euro 6 diesel should not be given 15 years age limit as they have higher emissions as compared to euro 4 taxis.	see response #50
214	The consultation doesn't take into account PM10 and PM2.5 emissions from break and tyre wear.	see response #203
215	The consultation also doesn't take into consideration the Mayor's commitment to making Central London zero emission by 2025 (as outlined in the Mayor's Transport Strategy), the proposed age limits would not support this commitment.	The UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.
216	The age limit of twelve years by 2022 is not nearly sufficient and it is not clear as to how this will reduce the emissions by as much as 65% of 2013 values by 2025.	<p>We have proposed that a new age limit for taxis should be introduced over a phased period of time from 1 November 2020 with the maximum taxi age limit reduced to 12 years by 2022 for Euro 3, 4 and 5 taxis.</p> <p>We've not proposed a longer period for the transition to a lower age limit as by law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.</p>

217	How this relatively subtle approach is helping reduce the exposure of passengers (and drivers) to the known high pollution levels within the taxis themselves?	We undertook an Integrated Impact Assessment (IIA) to assess the impacts of the proposals on different groups including passengers. The IIA identified a positive impact on taxi passengers from potentially improved air quality, it stated that, "Taxi drivers, taxi passengers and pedestrians will experience a significant benefit as a result of the improvement in air quality".
218	They note that the government is offering up to a £10,000 incentive to the first 1250 drivers wishing to buy a new vehicle - there are 21,000 black cabs licensed and currently only around 1,100 ZECs in operation. They suggest a greater incentive scheme with the capacity to reach all drivers rather than a small percentage may have more impact.	<p>Grants are already available to support taxi drivers who wish to purchase a ZEC taxi and it is proposed that ZEC taxis will retain a 15 year age limit.</p> <p>A new LPG conversion grant will also be available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.</p> <p>The Government also offers a Plug-in grant which reduces the cost of purchasing a ZEC taxi by £7,500.</p>
219	Ensure that the principle of the polluters pays is established in London	The polluter pays principle has been established in London via the Ultra Low Emission Zone (ULEZ). Taxis are exempt from ULEZ as it was felt that their emissions would be addressed by specific policies which were put in place including amending licensing regulations so that from January 2018 all newly licenced vehicles had to be ZEC, introducing a delicensing scheme and providing grants towards the purchase of ZECs. We did examine requiring taxis to pay the ULEZ charge as part of this work, but after careful consideration this was not taken forward. The reason for this is that it would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge.
220	It is entirely appropriate that (as in New York) a levy/charge potentially as part of a wider Road User Charging programme, includes taxis as a matter of urgency to reduce the impact of the high levels of NOX that they emit.	see response #5 + #6

221	Removing any congestion charge exemptions that taxis enjoy currently.	<p>Taxis are exempt from the Congestion Charge and this is due to the way they are regulated and the role they play in providing an accessible door to door service in the Capital.</p> <p>Requiring taxis to pay the Congestion Charge was not proposed in this consultation as this would not guarantee the required reduction in emissions as taxi drivers could pay the charge and continue to use the same taxis, limiting the impact on reducing emissions.</p>
222	Ensuring that taxis are not exempt from any other/future charges such as ULEZ.	see response #153
223	Taxis are subject to other policies that are outlined in the MTS such as Vision Zero and that as soon as possible.	see response #196
224	They are fitted with safety devices such as mandatory intelligent speed assistance.	see response #154
225	They request better subsidies to be able to afford LPG taxis.	A new LPG conversion grant is available for taxi owners with Euro 5 taxis. The grant will fund around half of the cost of the conversion and converted taxis will retain a 15 year age limit.
226	They make a request to remove Uber.	see response #28
227	While the oldest Euro III and Euro IV taxis will remain in the fleet for a short time under the LTDA's proposals, these vehicles are mostly driven by members of the trade who are using them less than newer drivers. In addition, almost all remaining Euro III taxis (bar 80) would be scrapped by 2022 even if the age limit remains at 15 years. Our full impact assessment shows that retrofitting 4,500 Euro V taxis – being the most heavily utilised vehicles in London – would deliver much more significant NOx savings, even if the older Euro III and IV taxis remain within the fleet until they reach the 15-year age limit.	see response #162

228	Retrofitting all licensed Euro V diesel taxis in London to a certified Euro VI standard, more NOx emissions will be saved than if TfL reduces the taxi licence age limit from 15 to 12 years over a phased period between 2020 and 2022 (alongside mandating the maximum taxi operating age to the same as the relevant age limit from November 2019). They set out information on the proposal and state that it would provide a better NOx saving by November 2022 compared with TfL's current proposals.	see response #162
229	They raise concerns about the resale and rental markets and the impact the proposals have had on it.	see response #40
230	They are concerned about the cost of the new ZEC and Euro VI taxi.	see response #88 + #89
231	They consider that it is not the most effective way to reduce the trade's contribution to NOx emissions in London, and that it will have a disproportionately negative impact on the trade and the livelihood of its drivers.	By law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). We undertook an option selection process looking at a range of options to achieve the necessary reduction in emissions from taxis. This process concluded in a package of measures that provided the greatest level of certainty of emissions savings, while also balancing the impact on the taxi trade with the speed with which any such changes could be introduced.
232	They ask for consideration of grants to help with hardship issues.	see response #149
233	It is vital all elements of the transport system play their part. For example, while there are approx 21,000 black cabs there are over 85,000 PHV. It is important to ensure that this is being looked holistically with all mobility providers playing their part.	The Mayor's Transport Strategy recognises that all of London's transport network and mobility providers must contribute to the meeting of legal air quality levels. Policy six of the Strategy commits that, "The Mayor, through TfL and the boroughs, and working with stakeholders, will take action to reduce emissions - in particular diesel emissions - from vehicles on London's streets, to improve air quality and support London reaching compliance with UK and EU limits as soon as possible."

234	TfL should also explore what contribution PHV can make to meeting sustainability targets and ensure that there is a consistent approach being applied across the board.	PHVs are subject to different emissions requirements to taxis and have a ten year age limit. All PHVs also need to meet exhaust emissions standards for the Ultra Low Emission Zone or pay an additional daily charge when travelling within central London.
235	Any decision to reduce the age of vehicles by one year should be accompanied by a plan to fully support this transition.	see response #218
236	Ensure there are sufficient incentives are in place to support drivers transition to lower-emission vehicles give the important role taxi's play in the mobility landscape.	see response #218
237	Over the past number of years a significant number of drivers have transitioned to Euro 6. LPG and ZEC taxis. As rightly noted in the impact assessment these vehicles emit lower levels of NOx than their predecessors, and therefore they consider it right that they are subject to the 15-year age limit.	This comment has been noted.
238	Request that there is support the small number of drivers who find themselves in a difficult position and in need of the hardship exemption.	see response #149
239	The 2013 London Atmospheric Emissions Inventory (LAEI), released in August 2016 ¹ , estimated that approximately 37% of PM10 generated by road vehicles in the City of London is caused by the general wear of tyres and brakes. As electric vehicles are traditionally heavier than fossil-fuelled vehicles, electric vehicles may potentially produce more emissions in vehicle braking.	Whilst the potentially greater kerb weight of an equivalent electric vehicle would theoretically lead to increased tyre wear and associated emissions, the increased weight is not a large proportion of total vehicle mass, so any increases are likely to be small, and may well be offset by other features such as regenerative braking. This is a growing field of research where further study would be beneficial.
240	Sensitivity analysis procedures be used to explore and quantify these impacts, and that evaluation strategies be put in place to monitor the effectiveness and share wider learning of reducing the hardships on drivers as an outcome of these proposals.	We will ensure that the impacts of the proposals are adequately monitored, should they be confirmed.

241	Reducing the age limit could cause an unnecessary shortage of vehicles which could create a situation where licensed drivers are unable to work due to a lack of vehicles.	We undertook an Integrated Impact Assessment (IIA) to assess the impacts of the proposals on different groups including taxi drivers. The IIA identified a number of options for owner-drivers who are affected by proposals to mandate the maximum operating age and the phased age limit reductions. It also set out the options for fleet owners.
242	The proposals may create a situation where there is a shortage of taxis available for the public to be able to hire. This would have an adverse affect on taxi drivers.	<p>We don't believe that the proposals will have a fundamental affect on the supply of taxis. There a number of ways for taxis to meet our requirements, some of these are outlined in section 1.4.1 of this report.</p> <p>We value the reliable and trusted service that London's taxis provide and recognise their contribution to providing quick, accessible, safe and knowledgeable travel across London.</p>
243	There are approximately 1000 fewer diesel powered taxis as of 21st April 2019 than there were at the beginning of 2019, meaning that an average of around 62 diesel powered taxis are leaving the fleet every week since the start of the year. Therefore the necessity to go further by reducing the age limit is negated by the fact that numbers are already reducing at a high rate.	see response #10
244	The cost of a new ZEC vehicle is excessive and this can be offset by allowing a vehicle to be continued to be licensed beyond it's 15th anniversary and up to 16 years.	see response #8
245	The age limit should continue to be reduced to 10 years by 2024 to match that of other UK city regions.	<p>Reducing taxi age limits at a quicker rate (e.g. a blanket 12 year age limit operable from 2020) was one of the options initially considered. However, this pace of change was considered to be unreasonably onerous for the taxi trade given the time period and potential economic impact on them.</p> <p>The proposed phased approach, with the age limit reduced to 12 rather than 10 years for Euro 3, 4 and 5 taxis, was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>

246	Euro 6 taxis have higher NOx emissions than Euro 4 so all should have the same age limit.	see response #50
247	LPG & ZEC could have greater age limits assuming they meet technical/emissions test specifications and maintain their emissions performance throughout their lives.	We're not proposing to increase the age limit for ZEC taxis or newly converted LPG taxis and consider that a 15 year age limit for these taxis remains appropriate. It is important that there continues to be an age limit for ZEC and newly converted LPG taxis and that this is set at an appropriate level as this helps increase the prevalence of vehicles with modern safety features as standard – the latest ZEC taxis, for example, come with Autonomous Emergency Braking for people walking and cycling, lane-departure and forward collision warning systems.
248	Differing taxi emissions could be recognised by variations in the annual taxi license fee to promote low/no emission taxis.	The taxi vehicle fee covers the cost of the application, inspection and issuing of the licence and these costs are the same regardless of the emissions standard of taxis.
249	Differing taxi emissions should be recognised by introducing rank permits with differing charges for low/no emission taxis at popular/busy taxi ranks e.g. main line Stations. This will reduce the taxi emissions that cause the poor air quality hotspots caused by over-ranking by diesel powered taxis. Variable rank permit charges could reflect both the taxi emissions standard (free or cheap for zero emissions capable, high for old diesels) and times of day (low charge at time of day when there is un-met demand and high charge at times of day when there is un-met supply).	We have been exploring options for designating taxi ranks for use by ZEC taxis only and will continue to assess the feasibility of this. However, if diesel taxis are not allowed to use certain ranks or drivers must pay a charge to do so then this could encourage the drivers of those taxis to continue driving around, waiting to be hailed on the street and this could have a negative impact on air quality and emissions.
250	Road traffic orders should be introduced at all ranks to prohibit idling by taxi vehicles that are stationary, either on the rank or when queuing to join the rank.	see response #130
251	Reduce number of black taxis.	The number of licensed taxis and taxi drivers has remained fairly constant over the past decade. Information about the current number of licensed taxis and taxi drivers plus historic information is available on our website here . We have no powers to cap the number of licensed taxis or taxi drivers and so this suggestion is not an option.
252	Enforce no idling as it still goes on despite rules.	see response #130

253	EURO 6 taxis are likely to be considerably higher than LPG and ZEC models, and their real world emissions are likely to be even higher than forecast during laboratory testing, they do not consider that EURO 6 taxis should be allowed to retain a 15 year age limit.	see response #50
254	NOx retrofitting for Euro 5 taxis could be part of the solutions considered. Retrofit solutions could bring much quicker air pollution improvements without the need to anticipate vehicles delicensing or scrapping. The cost per vehicle would be lower than a conversion to LPG (below 5000 pounds per vehicle), could be entirely covered for taxis' owners (such as your LPG fund), and mandatory for Euro 5 vehicles.	see response #162
255	Software retrofit should be considered as a least-cost option. Euro 5 TX4 LTI taxis are using the R 425 engine from VM Motori (a sister company of FCA, Fiat Chrysler Automobiles). The extremely poor real-world NOx emissions of the Euro 5 TX4 could be substantially improved performing mandatory calibration updated similarly to what the VW group, FCA itself, and other manufacturers have announced in the wake of Dieselgate. For that matter, the type-approval authority that certified this vehicle model type should be approached. The impact of the software retrofit on CO2 emissions and engine durability would have to be assessed and guaranteed by the manufacturer.	We are not aware of a software update for these vehicles. The previous manufacturer of the TX4 Euro 5 taxi model no longer exists so no development of mandatory calibrations of ECU's could be carried out or endorsed. The type approval authority (VCA) is unlikely to engage in respect of technology produced by a company which no longer exists.
256	Vehicles delicensed as taxis can still be used as passenger cars and therefore still driven in London. Even though these vehicles would have to pay to drive in the ULEZ and probably drive less than taxis, TfL should evaluate the mitigation of the delicensing benefits on air quality.	We think this will impact on a minimal number of vehicles. Any vehicle that does not meet the required emissions standard will be subject to pay the ULEZ charge.
257	Only one ZEC Taxi available.	see response #137

258	Need more charging points.	TfL is delivering 300 rapid charge points in London by the end of 2020, and many more independent rapid charge points are coming forward alongside this. Other types of charge points are also of use to taxis, and across London there were 2,400 publically accessible charge point devices according to Zap-Map (Dec 2018), and the number is growing fast. The Mayor recently convened a Taskforce to look at the issues around charge point installation in London, and to put forward recommendations as to how to deliver what London needs. This report launched in June 2019 and can be found at https://tfl.gov.uk/modes/driving/electric-vehicles-and-rapid-charging
259	If TFL are concerned about air pollution in London why do they insist on issuing licences to non-electric mini cabs or buses, as I now understand that bus companies are now be allowed to use Euro 6 vehicles.	PHVs are subject to different licensing requirements to taxis and already have a ten year age limit. Buses provide a vital alternative mode to the private car in central London and are an efficient and sustainable mode of transport. All TfL buses operating in the Ultra Low Emission Zone (ULEZ) in central London meet or exceed Euro VI emission standards and our growing fleet of greener buses now includes over 150 electric buses. From 2020, all new single deck buses entering the fleet will be zero emission at tailpipe, contributing to improving air quality. We are also introducing Low Emission Bus Zones across London where all scheduled TfL buses travelling within the zone will need to meet or exceed the latest Euro VI emissions standards.
260	They will be looking at the legal position of you taking away three years plates off of each taxi in their fleet and will expect to receive in compensation £28,800 loss of earnings per cab for every cab taken off the road three years earlier than promised if this plan goes ahead.	<p>Following the previous consultation on age limits, we advised that progress on the delicensing and ZEC uptake would be monitored annually and reviewed in early 2020, or sooner if necessary. If it was apparent there has been insufficient progress, and that further urgent measures from the taxi fleet would be required to address air quality in London, then a reduction in the mandatory age limit (for example to 10 years) could be necessary, subject to further consultation.</p> <p>It is clear now that the target of 9,000 ZEC taxis or a 45 per cent reduction in harmful taxi NOx emissions will not be reached. In fact, we are on track to reduce taxi NOx emissions by less than 10 per cent by 2025. In the meantime, London continues to be in breach of the air quality limits set out in law. Accelerating the rate at which polluting diesel taxis are taken off the road is necessary to meet the reductions in the London Air Quality Plan.</p> <p>There are a number of options available to taxi owners if the proposals to reduce age limits are approved. This includes the government grant towards the purchase of a ZEC taxi, our new enhanced delicensing scheme, LPG conversion scheme and relicensing current vehicles prior to 1 November 2019.</p>

261	15 years is too old for a licenced vehicle. They are currently reviewing their policy and looking to have a maximum age of new vehicles will be 7yrs and Euro 5 standard for emissions.	Reducing taxi age limits further beyond the proposed phased reduction to 12 years is not appropriate at this time. A quicker pace of change was considered however we concluded that it would be unreasonably onerous for the taxi trade and the potential economic impact that substantially lower age limits would bring.
262	From January 2018 the only vehicle available to the trade is the LEVC. This is a Vehicle that the majority of the trade cannot afford.	We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London. We're expecting that the Dynamo taxi will be available from summer 2019 and this will mean that taxi drivers have the choice of a full electric vehicle or a range extended electric vehicle.
263	We believe the impact will be immeasurable with figures ranging from 45- 70 million being wiped off the value of the fleet.	see response #70
264	If these proposals are implemented it would put many drivers' future financial security at risk and threaten their future livelihoods and their retirement plans.	see response #85
265	By exploring things like retrofitting all licensed Euro V diesel taxis in London to a certified Euro VI standard, or encouraging more to look into LPG and also having the choice of more than one vehicle it would mean that more NOx emissions will be saved than if TfL reduces the taxi licence age limit from 15 to 12 years.	see response #162
266	9 or 7 years would be better.	see response #261
267	They are concerned about the approach and the lack of effective mitigation plans which is putting jobs at risk.	see responses #83-86
268	There should be a mandate for the maximum operating age for taxis, this needs to be set at the 16th year under the current 15 year age limit; until TfL explores and identifies other options.	We are proposing to make the maximum operating age the same as the relevant age limit for all licensed taxis from 1 November 2019. This would ensure that no taxi is licensed to operate over its relevant maximum age limit, preventing taxis operating potentially for nearly a full 12 months beyond their age limit.

269	The 15 year age limit should stay until other options such as abatement equipment are identified.	We are proposing to retain a 15 year age limit for Euro 6, ZEC and newly converted LPG taxis. However, we've not proposed delaying changes to Euro 3, 4 and 5 taxis as by law, the UK must reduce NOx and other harmful emissions as quickly as we can. In order to achieve air quality compliance by 2025, London must reduce taxi emissions by 65 per cent (on 2013 levels). This target is included in the Government's air quality plan for tackling roadside NOx emissions (see paragraph 139(e)), which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable taxis by 2020.
270	Unite is concerned this proposal will give PHVs an unfair advantage over taxis and in doing so would work against the Mayor's 2016 Taxi and Private Hire Action Plan.	There is already a maximum age limit of ten years for PHVs. We are proposing a phased approach to reducing taxi age limits to 12 years for Euro 3, 4 and 5 taxis to help achieve air quality compliance by 2025.
271	That the process of age limit on Euro 3, 4 and 5 should not commence while there is only one type of electric taxi vehicle on the market.	We continue to work with vehicle manufacturers and support them so as new vehicles can be introduced which can be used as taxis in London. We're expecting that the Dynamo taxi will be available from summer 2019 and this will mean that taxi drivers have the choice of more than one vehicle.
272	The limits should reduce to 10 year age limit as with PHVs.	see response #245
273	Be subject to the congestion charge in the same way as PHVs. The entire industry must share the burden.	see response #5
274	They encourage consideration of more granular licensing of taxis by geographic areas or zones, restricting access to highly polluted areas only to cleaner taxis.	We did examine requiring taxis to pay the ULEZ charge but after careful consideration this was not taken forward. The reason for this is that it would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge. Restricting access to some areas for certain types of taxi could create problems for taxi passengers as it would mean passengers in taxis which are restricted from certain areas may not be able to complete their journey or be dropped off at their required destination. This could have a significant impact on taxi passengers who require a door to door service. However, the Mayor's Transport Strategy does propose to "seek to implement zero emission zones in town centres from 2020 and aim to deliver a zero emission zone in central London from 2025, as well as broader congestion reduction measures to facilitate the implementation of larger zero emission zones in inner London by 2040 and London-wide by 2050 at the latest." (Proposal 35) Access for taxis will be considered as part of this.

275	Reduce the age limit sooner and get rid of as many as possible of the old polluting and noisy taxis.	see response #12
276	They would like to see a consistent approach to taxis and minicabs	see response #148
277	TfL could and should be doing more to tackle emissions.	<p>We are taking action to help clean up our dangerously polluted air and improve public health. To help improve the air we breathe, we're introducing measures to encourage more walking, cycling, use of public transport and to encourage more efficient freight deliveries.</p> <p>Every bus you catch in central London now meets the highest emission standards. All buses operating in the ULEZ area will meet Euro VI emissions standards or be electric. Our improvements to the entire bus network across London include the introduction of Low Emission Bus Zones.</p> <p>ULEZ is another way to help reduce the most harmful emissions generated by road transport in central London and across the Capital.</p>
278	They are very disappointed that a diesel taxi purchased in 2017 could still be polluting streets in Westminster and throughout the rest of London up to 2032 without any penalty.	We are proposing that Euro 6, ZEC and newly converted LPG taxis retain a 15 year age limit and the only proposal that would affect the owners of these taxis is the proposal to mandate the maximum taxi operating age. We have noted your concerns that a Euro 6 vehicle licensed in 2017 may still be driving in Westminster in 2032.
279	Include Euro 6 diesel taxis in the reduced age limits.	see response #201
280	Speed up charge points for Electric taxis.	TfL is on track to meet its target of installing 300 in London by the end of 2020, and during this time many independent rapid charge points are also coming online across the capital. Also see response to #258

5.7 Analysis of the LTDA alternative proposal

In the LTDA consultation response, an alternative proposal to reduce NOx emissions from taxis was put forward. In summary the LTDA proposal includes:

- Mandating 15 year expiry on 1 November 2019 (as set out in our consultation proposals)
- Retaining a 15 year age limit for all taxis
- Mandating retrofit of all Euro 5 taxis to Euro 6 standards (TfL funded from the £42m taxi delicensing fund)

The LTDA calculated what a TfL funded, mandated Euro 5 to Euro 6 conversion with a rolling programme of conversions over three years would deliver, and suggested that it would deliver greater NOx reductions, and more quickly than the age limit proposals.

We have modelled the proposals on a like for like basis with proposals to reduce taxi age limits for Euro 3, 4 and 5 taxis to 12 years by 2022. The results of the modelling show that a Euro 6 retrofit programme does not achieve greater NOx savings than age limit proposals, and in fact misses the 2025 target reductions by 10 per cent.

Differences in methodology

LTDA methodology for calculating overall emissions savings was to create a NOx g/km and apply it to every Euro 5 vehicle.

TfL methodology accounts for mileage and location of different types of taxis. The LTDA methodology does not.

LTDA's modelling had not accounted for any emissions from converted taxis. That is to say it assumed that 100 per cent of the NOx emissions from converted taxis were removed. In reality, standard Euro 6 taxis emit around 20 per cent less NOx than a Euro 5 taxi (COPERT 5⁷). The LTDA modelling therefore significantly overestimated the scale of NOx reduction by effectively assuming that the converted taxis did not emit any NOx.

For both sets of proposals, TfL has included the savings expected from mandating 15 year expiry in 2019 (14 per cent reduction) and the impact of the delicensing fund to date (11 per cent reduction).

⁷ COPERT is the EU standard vehicle emissions calculator. It uses vehicle population, mileage, speed and other data such as ambient temperature and calculates emissions and energy consumption for a specific country or region.

Differences in Euro 6 emissions assumptions

TfL has modelled the Euro 5 to 6 retrofit proposal based on established Euro 6 emissions factors. In the absence of any other reliable evidence, it would not be appropriate to do otherwise.

The LTDA thinks this approach may underestimate the performance of the retrofit solution as the conversion company has indicated that the emissions performance of retrofitted vehicles could be better than the established Euro 6 emissions factors which are based on COPERT and used by Defra. It is important to note that the COPERT data is based on the actual performance of vehicles on the road, and not on a type approval duty cycle, which is often a poor guide to actual emissions.

Work is underway to retrofit a test taxi to Euro 6 standard. However, at this stage the retrofit is unproven and the level of reduction in emissions it may achieve in real-world London driving conditions is unknown. Without evidence to the contrary, we have adopted the assumption that Euro 6 compliance will be achieved to the levels indicated by the COPERT emissions factors, but not more than that. This is the only prudent approach until test results from type approval duty cycles and real-world taxi operations are available and approved by TfL.

The LTDA has made comparisons with the TfL approved Euro VI bus retrofit, which performs significantly better than a converted Euro 6 taxi as modelled. EU law uses Arabic numerals (e.g. Euro 6) to describe type approval conducted to light duty vehicle standards. Roman numerals (e.g. Euro VI) are used to describe a heavy vehicle type approval. The approval process for vehicle emissions is quite different in each case.

For a light duty vehicle, which includes passenger vehicles with fewer than 9 seats including the driver, or goods vehicles with a gross vehicle weight not exceeding 3500kg, the vehicle is tested on a chassis dynamometer in an emissions laboratory, using the World Light-duty Test Cycle (WLTC). This is the type 1 test under type-approval procedures. The appropriate emissions limits for the class of vehicle are applied. That constitutes a Euro 6c approval. More recent approval tests, if successful in the laboratory, are subjected to on-road verification testing, known as Real Driving Emissions (RDE). (This is mandatory on new approvals from Sept 2019). For RDE tests there are conformity factors applied which allow for variation in road/climatic conditions and also variance between laboratory and portable emissions analysers. These conformity factors are multiplication factors applied to the on-road measured emissions. The factor is 2.1 for Euro 6d-temp and 1.5 for Euro 6d.

Heavy duty vehicle emissions type approval is carried out on an engine only basis, using an engine dynamometer (a bench test). The engine is tested according to the World harmonised Stationary Cycle (a range of fixed rpm and load settings) and the World Harmonised Transient Cycle (a pattern of varying rpm and load settings). The appropriate emissions limits are applied. The engine is also tested for 'off-cycle emissions' using a number of randomly selected speed/load settings. If successful, this is followed by 'on-road verification' where the engine is installed into a vehicle chassis and road tested using portable measurement equipment and a payload of 50-60%.

The heavy duty approval requirement to perform on-road verification has led to tightly controlled emissions at Euro VI since the standard became mandatory in January 2014. This has demanded very careful calibration of engines and after treatment systems to control emissions. Whereas light duty approvals to Euro 6d-temp or 6d standard with RDE included, have only been phased in since 2017 and are not yet fully implemented for all light vehicle types (notably N1 light commercial vehicles), creating a lag in achieving such accurate emissions control. Because the approval test methodology is so different, it is not safe to assume that a percentage emissions reduction seen on one vehicle type (heavy duty) will also apply to another type (light duty). For Euro VI/6 diesel engines, the most common after treatment system is selective catalytic reduction (SCR), which is very dependent on the temperature of the exhaust catalyst to operate efficiently. The temperature is influenced by vehicle specification, operating conditions and 'payload'. This means that appropriate emissions and durability testing over representative drive cycles is vital to ascertain the overall emissions reductions.

Extensive work was done over a number of years on optimising TfL bus retrofits to ensure that they work for a large proportion of the cycle and therefore achieve 90 per cent or greater NOx reduction over the duty cycle. A critical factor is whether a high exhaust temperature can be maintained throughout the duty cycle, to ensure that the selective catalytic reduction (SCR) system is most effective. Whether a taxi retrofit will be equally capable of maintaining a high NOx conversion rate is as yet unproven.

In common with the bus retrofit systems, it will be necessary for the retrofit manufacturer to demonstrate to the satisfaction of TfL that the system is protected against neglect or abuse, possibly through requirements for on-board in operation telemetry (as with the buses) or other monitoring of in service performance. One particular issue is that SCR retrofits require the use of a consumable fluid, AdBlue. Use of emulators to avoid AdBlue usage is a small, but recognised (by DVSA and traffic commissioners) issue amongst a minority of heavy vehicle operators and TfL will need to ensure that retrofit systems for taxis remain fully efficient in-service.

The approach to modelling bus and taxi emissions is entirely consistent – both sets of emissions calculations are based on COPERT emissions factors, in line with best practice. COPERT emissions factors for buses reflect the fact that there is a very established programme of monitoring bus emissions and performance across different Euro standards, in addition to performance of approved retrofit solutions. The lack of any appropriate testing and approval of a Euro 5 taxi retrofit means it is not appropriate for TfL to assume the same level of reduction is practically achievable, particularly given the importance of achieving our adopted targets for emissions reductions and air quality improvements in London, as set out in Defra’s Air Quality Action Plan.

How the proposals perform

The results of the air quality modelling for the LTDA proposal are summarised in Figure 1 below, followed by the results of the air quality modelling for the phased age limit proposals (Figure 2) and finally a comparison of the options over time, against our targets (Figure 3).

It should be noted that the emissions savings shown in Figure 1 assumes continued uptake of delicensing. In reality, however, this would not be possible if the money is diverted towards a retrofit scheme. The graph therefore presents an optimistic scenario for emissions savings based on the proposals.

Figure 1. LTDA Mandatory Euro 5 to Euro 6 conversion

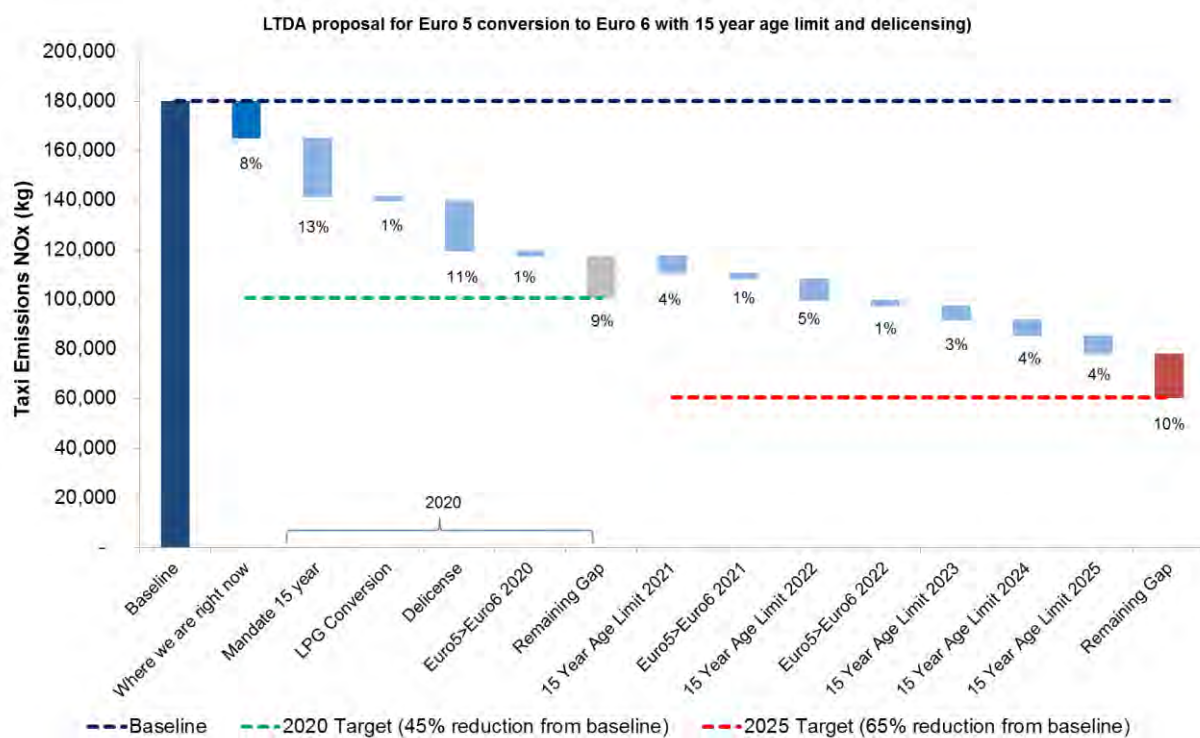


Figure 2. TfL phased age limit proposals

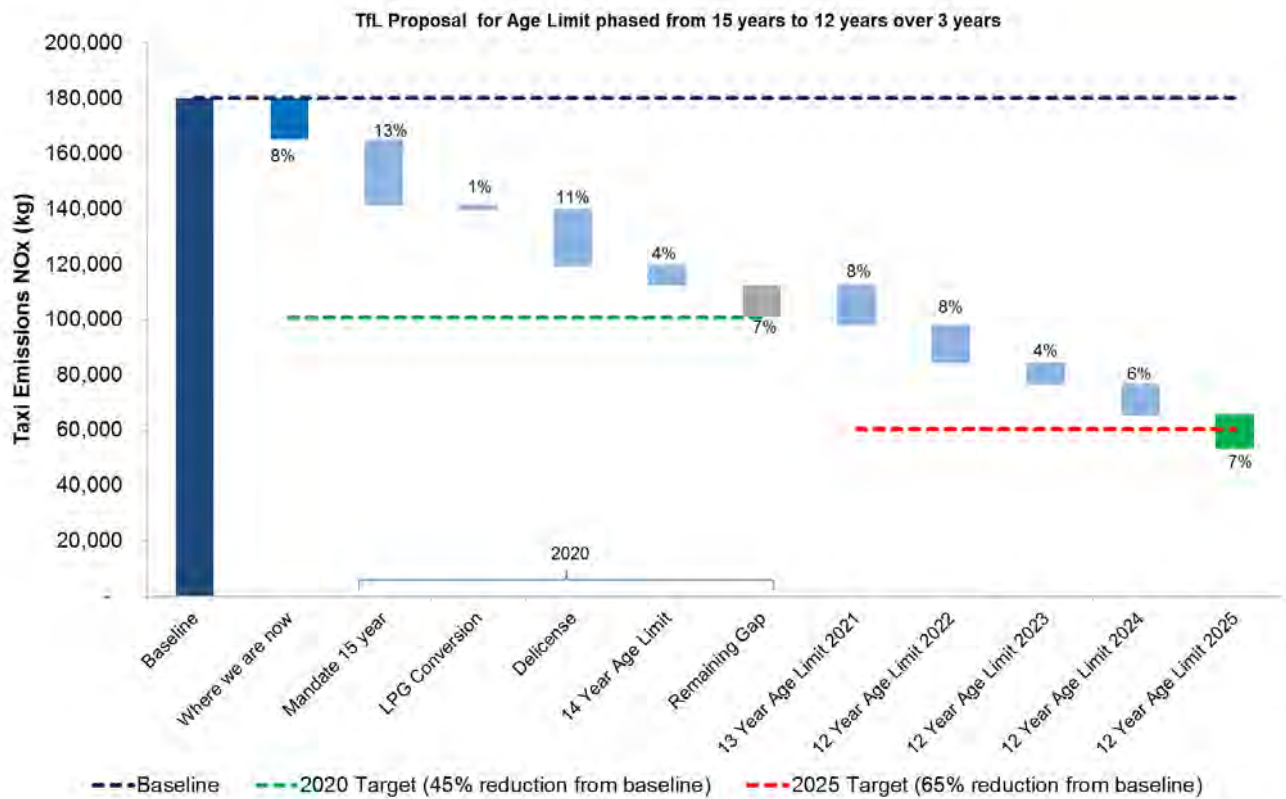
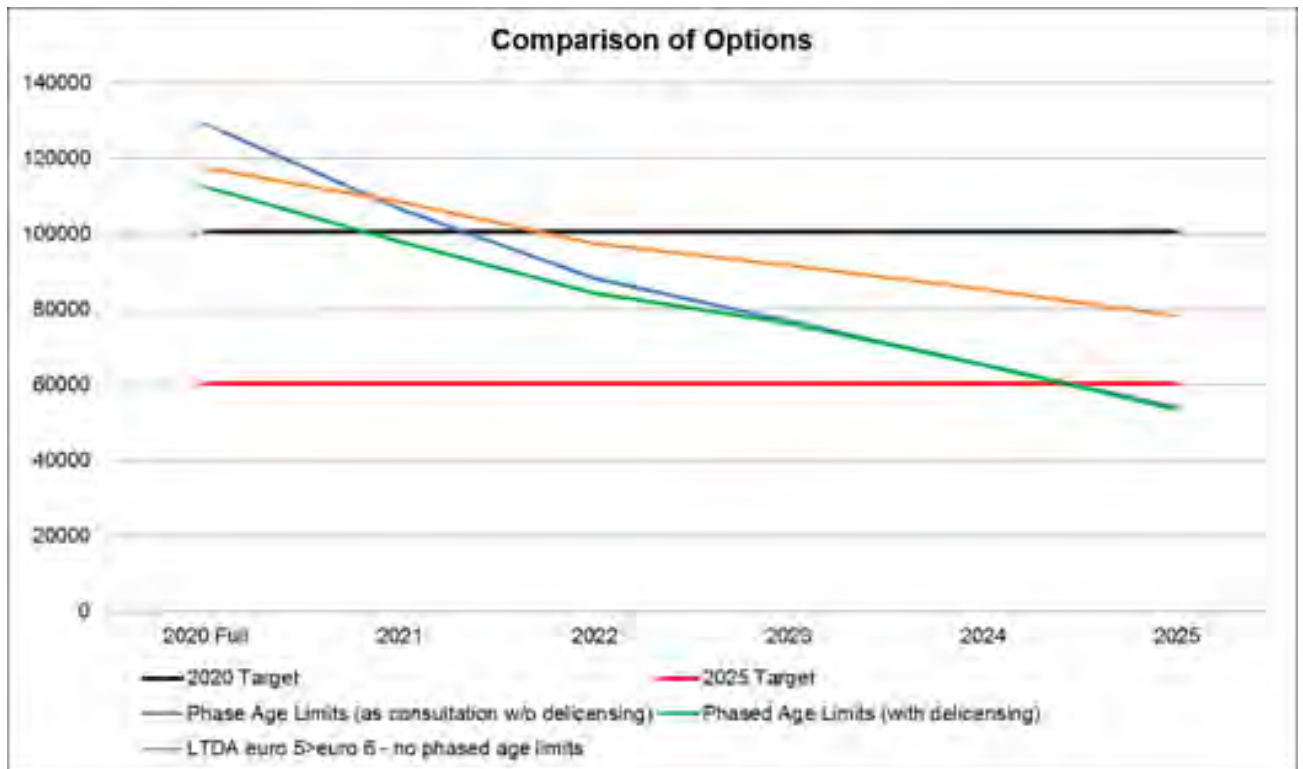


Figure 3. How the options compare against each other



Feasibility / delivery and timescale

We are required by law to achieve legal air quality limit values and whilst seeking to achieve these we must reduce exposure to pollutants as quickly as possible, and with the greatest degree of certainty.

There is no approved diesel retrofit currently available, therefore no certainty that the scheme could be delivered as set out.

It is expected that it would take approximately 12 months for a retrofit solution to be approved, nationally accredited (EST CVRAS is specified by TPH) and conversion centres set up and running and ready to convert vehicles at scale. The process is summarised below (this should not be considered exhaustive, but provides an overview of a number of key steps):

- Application made to TfL's Taxi and Private Hire Vehicle Policy Manager
- Proposed alternative system installed, photographed and supplied to TfL
- Inspection by TfL prior to legislative emissions testing to ensure the product is fitted according to application
- Legislative emissions testing cycle to determine emissions reduced to Euro 6d standard, utilising the WLTC test cycle. The class of cycle is the N1 class 3b test.
- Durability trial of equipment and system, including a minimum distance of 10,000 miles. During this trial the taxi is not permitted to operate as a taxi or to carry fare paying passengers. Weekly reports submitted to TfL based on real time data provided by remote tracking technology. TfL inspection at mid and end point of 10,000 mile trial
- Report submitted to TfL following durability trial
- Final series of legislative emissions testing
- Manufacturer also to achieve CVRAS (Cleaner Vehicle Accreditation Scheme) accreditation

In addition to testing timescales, if approved, a change as significant as mandating the conversion of all Euro 5 taxis would require another public consultation, extending timescales for delivery.

Funding

The LTDA proposed that the Euro 5 retrofit programme could be funded from the taxi delicensing scheme. There are not sufficient funds available for this. The number of applications received means that the majority of this fund is already accounted for. The proposal, which would cost in the region of £18m is therefore unfunded. If the taxi delicensing scheme were to be abandoned and the funds diverted to the LTDA retrofit proposal, this would potentially be unfair to those that had already applied for delicensing and would (at least) require a further consultation. Further, the benefits from the delicensing scheme in terms of emissions are expected to be very significant. These benefits from the delicensing scheme would be lost if the same funds were repurposed towards Euro 5 retrofits.

Summary of findings

Following the very useful discussion on 22 May, we have had further opportunity to consider the potential of the LTDA alternative proposal.

Unfortunately, after careful consideration, it is not considered that the LTDA proposal presents a viable alternative to reaching the target for reducing taxi NOx emissions by 2025 for the following reasons:

- **Air quality:** As can be seen in Figure 3 above, modelling indicates that we would not meet the 2025 target under these proposals and Euro 6 conversion for Euro 5 taxis would not deliver the same level of air quality benefits as the age limit proposals. On a like for like comparison, the LTDA proposal delivers less benefit, with less certainty and misses the 2025 NOx reduction target.
- **Feasibility, delivery and timescale:** In the absence of an approved retrofit, and the amount of time it would take to establish what level of benefit an approved conversion could achieve, it is not feasible to consider this to be an implementable alternative given the urgent need for action.

In addition, taxis which have been converted to run on Liquid Petroleum Gas (LPG) emit lower levels of NOx than a Euro 6 taxi. Any funding available for taxi conversions would therefore be better channelled towards LPG than diesel conversions. To this end, provision has been made to support LPG conversions in the enhanced delicensing scheme. Under the LTDA proposals, diesel taxis would remain in the fleet for longer, emitting NOx at higher levels than LPG or ZEC taxis. Our ambition remains to transition to a fully electric taxi fleet as quickly as possible to maximise emissions savings.

6. Next steps

Following the completion of this report, a decision paper has been drafted to collate the relevant material from this report together with the IIA and supporting materials for the consultation. The decision to be made, which relates to a change to the 'conditions of fitness' for taxis, which determine how they are permitted to operate in London, will be authorised by the Commissioner of TfL.

If approved, the proposal to mandate the maximum operating age would begin on 1 November 2019, with the phased reduction in age limits coming into effect on subsequent years on 1 November until reaching 12 years in 2022. The LPG conversion scheme would launch on 1 November 2019, and the category exemptions for alternative fuels, classic/niche vehicles and hardship would also cease on this date.

If the proposals are implemented, owners of 14 year old taxis in particular would need to take action before 1 November in order to keep operating beyond their 15th birthday. Letters would be sent to owners of 14 year old taxis explaining to them that if they want to maximise the time their vehicle is able to operate that they should present their vehicle for relicensing before the proposal to mandate the maximum operating age is introduced in November 2019.

Appendix A: Codeframes of comments

The tables below show responses to each open question at the total level (all respondents), for those in the taxi trade (All London taxi drivers, Suburban taxi drivers and taxi owners) and for other respondents who are not members of the taxi trade.

Figure 9: Question 3 Do you believe that we might be able to reduce NOx emissions from taxis by 65 per cent by 2025 in any other way? If so, how might we do so? (all respondents)

	Total		Member of taxi trade		Not member of taxi trade	
Base	2,808		1,599		1,154	
Overall Agreement/Disagreement (Grand Net)	283	10%	151	9%	127	11%
Believe emission will be reduced	140	5%	55	3%	85	7%
Don't believe emission will be reduced	121	4%	79	5%	37	3%
Reducing maximum age of taxis will not help reduce pollution/emissions levels	28	1%	21	1%	7	1%
Suggestions for taxi trade (Grand Net)	1,899	68%	1,027	64%	836	72%
Hardships of Proposal (net)	194	7%	158	10%	33	3%
This would create hardships for taxi drivers	181	6%	149	9%	29	3%
Other hardships of proposal mentions	18	1%	14	1%	4	0%
Economy (net)	696	25%	393	25%	291	25%
Assistance/Grants (subnet)	375	13%	236	15%	134	12%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	358	13%	226	14%	127	11%
Other suggestions for taxi trade assistance/grants mentions	20	1%	12	1%	8	1%
Congestion/ULEZ Charge (subnet)	138	5%	7	0%	127	11%
Taxis should pay ULEZ charge (ZEC/LPG/electric/diesel)	90	3%	3	0%	83	7%
Taxis should pay Congestion Charge (ZEC/LPG/electric/diesel)	72	3%	3	0%	66	6%
Other suggestions for taxi trade Congestion Charge/ULEZ mentions	23	1%	1	0%	21	2%

	Total		Member of taxi trade		Not member of taxi trade	
Other Economy Mentions (subnet)	252	9%	197	12%	51	4%
Reduce cost of taxis (ZEC/LPG/electric/diesel)	165	6%	136	9%	26	2%
Impacts on value/re-sale value of taxis	58	2%	51	3%	5	0%
Other suggestions for taxi trade other economy mentions	38	1%	16	1%	20	2%
Maximum Age Limit/Requirement (net)	706	25%	414	26%	279	24%
Unfair to change goalposts/maximum age limit	203	7%	175	11%	22	2%
Allow natural wastage of taxis/taxi fleet	145	5%	118	7%	24	2%
Keep maximum age of taxis at 15 years old	132	5%	113	7%	18	2%
Reduce age limit of taxis sooner	89	3%	5	0%	83	7%
Reduce age limit of taxis to 10 years/Same as PHVs	59	2%	7	0%	52	5%
Reduce age limit of taxis (unspecified number of years old)	49	2%	11	1%	38	3%
Allow more time for age limit transition	41	1%	29	2%	12	1%
No age limit for electric taxis	31	1%	26	2%	5	0%
Other suggestions for taxi trade maximum age limit/requirement mentions	88	3%	21	1%	62	5%
Taxi Fuel Source (net)	328	12%	177	11%	146	13%
Need more choice of taxi/no monopoly	136	5%	111	7%	23	2%
All taxis should be electric	95	3%	20	1%	73	6%
All taxis should be Euro 6 vehicles	31	1%	14	1%	17	1%
All taxis should be hybrids	25	1%	2	0%	22	2%
All taxis should be ZEC	25	1%	11	1%	14	1%
Retrofit technology to capture emission	24	1%	12	1%	12	1%
Other taxi fuel source mentions	27	1%	16	1%	10	1%
Number of taxis (net)	100	4%	20	1%	79	7%
Reduce amount of taxis (empty/plying for hire)	70	2%	9	1%	60	5%
Reduce/Cancel licence of/all high emission/taxis/vehicles	25	1%	7	0%	18	2%
Other number of taxis mentions	7	0%	4	0%	3	0%

	Total		Member of taxi trade		Not member of taxi trade	
Taxi Discrimination/Bias (net)	204	7%	135	8%	62	5%
Biased/unfair/targets taxis/puts pressure on taxi trade	202	7%	134	8%	61	5%
Other taxi discrimination/bias mentions	4	0%	3	0%	1	0%
Taxi Pollution/Air Quality (net)	111	4%	27	2%	84	7%
Stop/Eliminate taxis from idling	98	3%	19	1%	79	7%
Other taxi pollution/air quality mentions	13	0%	8	1%	5	0%
Bus Lanes (net)	53	2%	32	2%	21	2%
Allow taxis to use bus lanes	37	1%	32	2%	5	0%
Taxis shouldn't be using bus lanes	16	1%	-	0%	16	1%
Miscellaneous Suggestions for taxi trade (net)	103	4%	42	3%	58	5%
Ban taxis from London (ZEC/LPG/electric/diesel)	33	1%	4	0%	28	2%
Enforce proper tests/spot checks/MOTs for taxis	28	1%	17	1%	10	1%
Other miscellaneous suggestions for taxi trade mentions	43	2%	21	1%	21	2%
Suggestions for Other Transport (Grand Net)	1,313	47%	860	54%	426	37%
Economy (net)	54	2%	26	2%	27	2%
Congestion Charge (subnet)	28	1%	15	1%	13	1%
Increase Congestion Charge	16	1%	10	1%	6	1%
Other suggestions for other transport Congestion Charge mentions	13	0%	6	0%	7	1%
General Economy (subnet)	27	1%	11	1%	15	1%
Other suggestions for other transport general economy mentions	27	1%	11	1%	15	1%
Vehicle Fuel Source (net)	178	6%	112	7%	63	5%
Conversion to LPG fuel	77	3%	54	3%	21	2%
Need more electric vehicle usage	54	2%	26	2%	27	2%
Need cleaner/bio diesel fuel vehicle usage	19	1%	14	1%	4	0%
Need more hybrid vehicle usage	15	1%	9	1%	6	1%
Other vehicle fuel source mentions	34	1%	21	1%	13	1%

	Total		Member of taxi trade		Not member of taxi trade	
Vehicle Modifications (net)	120	4%	80	5%	38	3%
Conversion to Euro 6 standards	66	2%	46	3%	20	2%
Other vehicle modification mentions	55	2%	35	2%	18	2%
Reduce/Ban Vehicles (net)	498	18%	351	22%	139	12%
Reduce/ban PHVs	313	11%	234	15%	74	6%
Reduce/ban buses/empty buses	145	5%	107	7%	38	3%
Reduce/ban online app services	63	2%	44	3%	17	1%
Reduce/ban commercial vehicles (parcel/construction/diesel)	46	2%	24	2%	21	2%
Other reduce/ban vehicles mentions	34	1%	17	1%	16	1%
Discrimination/Bias (net)	49	2%	5	0%	42	4%
Biased/unfair/targets PHVs/puts pressure on PHV industry	37	1%	1	0%	34	3%
Other discrimination/bias mentions	13	0%	4	0%	9	1%
Traffic/Congestion (net)	244	9%	179	11%	57	5%
Reduce traffic/congestion by keeping roads open	71	3%	61	4%	7	1%
I support reducing congestion/London has too much traffic/congestion	70	2%	53	3%	15	1%
TfL/road schemes/projects contribute to traffic/congestion	57	2%	48	3%	8	1%
Cycle lanes/super highways cause traffic/congestion	28	1%	21	1%	6	1%
PHVs cause traffic/congestion	25	1%	22	1%	2	0%
Encourage active forms of transport (walking, cycling)	19	1%	1	0%	17	1%
Other traffic/congestion mentions	17	1%	8	1%	9	1%
Other Transport Pollution/Air Quality (net)	69	2%	50	3%	16	1%
Fix emissions standard/test for all vehicles regardless of age	25	1%	17	1%	7	1%
Reduce pollution by keeping roads open	20	1%	14	1%	4	0%
Other transport pollution/air quality mentions	24	1%	19	1%	5	0%
Road Infrastructure (net)	364	13%	291	18%	68	6%
Cycle Lanes (subnet)	190	7%	146	9%	42	4%
Eliminate/Get rid of cycle lanes	170	6%	137	9%	31	3%

	Total		Member of taxi trade		Not member of taxi trade	
Other cycle lanes mentions	24	1%	13	1%	11	1%
Road Signs/Traffic Lights (subnet)	38	1%	30	2%	7	1%
Change traffic light synchronisation	33	1%	27	2%	6	1%
Other road signs/traffic lights mentions	9	0%	6	0%	2	0%
General Road Infrastructure (subnet)	241	9%	205	13%	32	3%
Stop closing roads/Open up closed roads	179	6%	151	9%	25	2%
Stop eliminating/reducing road space	64	2%	57	4%	6	1%
Other suggestions for other transport general road infrastructure mentions	15	1%	12	1%	3	0%
Electric Vehicle Infrastructure (net)	179	6%	116	7%	60	5%
Add electric charging stations	156	6%	99	6%	55	5%
Need rapid charging technology	35	1%	23	1%	11	1%
Increase battery life	25	1%	18	1%	6	1%
Other electric vehicle infrastructure mentions	5	0%	2	0%	3	0%
Miscellaneous Suggestions for Other Transport (net)	72	3%	40	3%	32	3%
Encourage use of public transportation	25	1%	9	1%	16	1%
Limit travel times for commercial/delivery vehicles	21	1%	17	1%	4	0%
Other miscellaneous suggestions for other transport mentions	29	1%	14	1%	15	1%
Miscellaneous Comments (Grand Net)	742	26%	436	27%	281	24%
General Pollution/Air Quality (net)	371	13%	187	12%	178	15%
Buses contribute to pollution/air quality problems/more than taxis	112	4%	68	4%	44	4%
Taxis contribute to pollution/air quality problems	94	3%	9	1%	84	7%
Taxi emissions are small part of pollution/air quality problems	78	3%	58	4%	19	2%
PHVs contribute to pollution/air quality problems more than taxis	29	1%	20	1%	9	1%
All vehicles/traffic/congestion contributes to pollution/air quality problems	28	1%	14	1%	14	1%
TfL's road schemes contribute to pollution/air quality problems	22	1%	17	1%	4	0%
Commercial vehicles contribute to pollution/air quality problems/more polluting taxis (parcel/construction)	20	1%	16	1%	4	0%

	Total		Member of taxi trade		Not member of taxi trade	
Improve scrapping scheme/scrapping scheme contributes to pollution	19	1%	9	1%	9	1%
Cycle lanes/super highways contribute to pollution/air quality problems more than taxis	15	1%	11	1%	3	0%
Other general pollution/air quality mentions	29	1%	13	1%	15	1%
Road Infrastructure (net)	79	3%	59	4%	16	1%
Concern about roadwork/roads in London	78	3%	58	4%	16	1%
Other road infrastructure mentions	2	0%	2	0%	-	0%
Political Affiliation (net)	54	2%	29	2%	17	1%
Do not like/agree with the Mayor	26	1%	11	1%	9	1%
Learn lessons from past/don't repeat same mistakes	15	1%	10	1%	4	0%
Other political affiliation mentions	14	0%	8	1%	5	0%
TfL Image (net)	132	5%	94	6%	31	3%
Do not like/agree with TfL	123	4%	88	6%	29	3%
Other TfL images mentions	10	0%	7	0%	2	0%
Additional Information Needed (net)	118	4%	93	6%	23	2%
No accuracy/relevant scientific figures to back this up	114	4%	93	6%	19	2%
Other additional information needed mentions	5	0%	1	0%	4	0%
Miscellaneous	122	4%	61	4%	56	5%
Concern proposals are money making/revenue raising schemes	45	2%	27	2%	16	1%
Abusive comments	8	0%	5	0%	1	0%
Other miscellaneous mentions	70	2%	30	2%	39	3%
Don't Know	13	0%	8	1%	5	0%
Nothing	45	2%	25	2%	20	2%
No Answer	15	1%	6	0%	9	1%

Figure 10: Question 3 Do you believe that we might be able to reduce NOx emissions from taxis by 65 per cent by 2025 in any other way? If so, how might we do so? (Those who *agree* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

	Total		Member of taxi trade		Not member of taxi trade	
Base	759		81		668	
Overall Agreement/Disagreement (Grand Net)	100	13%	13	16%	87	13%
Believe emission will be reduced	84	11%	10	12%	74	11%
Don't believe emission will be reduced	15	2%	3	4%	12	2%
Reducing maximum age of taxis will not help reduce pollution/emissions levels	2	0%	0	0%	2	0%
Suggestions for taxi trade (Grand Net)	563	74%	45	56%	509	76%
Hardships of Proposal (net)	5	1%	1	1%	4	1%
This would create hardships for taxi drivers	4	1%	1	1%	3	0%
Other hardships of proposal mentions	1	0%	0	0%	1	0%
Economy (net)	216	28%	20	25%	192	29%
Assistance/Grants (subnet)	88	12%	14	17%	74	11%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	85	11%	14	17%	71	11%
Other suggestions for taxi trade assistance/grants mentions	3	0%	0	0%	3	0%
Congestion/ULEZ Charge (subnet)	123	16%	4	5%	116	17%
Taxis should pay ULEZ charge (ZEC/LPG/electric/diesel)	84	11%	2	2%	79	12%
Taxis should pay Congestion Charge (ZEC/LPG/electric/diesel)	67	9%	2	2%	62	9%
Other suggestions for taxi trade Congestion Charge/ULEZ mentions	18	2%	0	0%	17	3%
Other Economy Mentions (subnet)	21	3%	5	6%	15	2%
Reduce cost of taxis (ZEC/LPG/electric/diesel)	7	1%	4	5%	2	0%
Other suggestions for taxi trade other economy mentions	14	2%	1	1%	13	2%
Maximum Age Limit/Requirement (net)	203	27%	13	16%	188	28%
Reduce age limit of taxis sooner	75	10%	3	4%	71	11%
Reduce age limit of taxis to 10 years/Same as PHVs	50	7%	4	5%	46	7%
Reduce age limit of taxis (unspecified number of years old)	38	5%	4	5%	34	5%

	Total		Member of taxi trade		Not member of taxi trade	
Allow more time for age limit transition	4	1%	0	0%	4	1%
Keep maximum age of taxis at 15 years old	2	0%	0	0%	2	0%
Unfair to change goalposts/maximum age limit	1	0%	0	0%	1	0%
Other suggestions for taxi trade maximum age limit/requirement mentions	57	8%	2	2%	53	8%
Taxi Fuel Source (net)	102	13%	7	9%	93	14%
All taxis should be electric	60	8%	2	2%	56	8%
All taxis should be hybrids	17	2%	0	0%	16	2%
All taxis should be Euro 6 vehicles	13	2%	0	0%	13	2%
All taxis should be ZEC	11	1%	1	1%	10	1%
Retrofit technology to capture emission	11	1%	0	0%	11	2%
Need more choice of taxi/no monopoly	6	1%	4	5%	2	0%
Other taxi fuel source mentions	6	1%	0	0%	6	1%
Number of taxis (net)	73	10%	3	4%	70	10%
Reduce amount of taxis (empty/plying for hire)	58	8%	2	2%	56	8%
Reduce/Cancel licence of/all high emission/taxis/vehicles	15	2%	1	1%	14	2%
Other number of taxis mentions	2	0%	0	0%	2	0%
Taxi Discrimination/Bias (net)	16	2%	1	1%	15	2%
Biased/unfair/targets taxis/puts pressure on taxi trade	15	2%	1	1%	14	2%
Other taxi discrimination/bias mentions	1	0%	0	0%	1	0%
Taxi Pollution/Air Quality (net)	77	10%	2	2%	75	11%
Stop/Eliminate taxis from idling	73	10%	2	2%	71	11%
Other taxi pollution/air quality mentions	4	1%	0	0%	4	1%
Bus Lanes (net)	21	3%	1	1%	20	3%
Taxis shouldn't be using bus lanes	16	2%	0	0%	16	2%
Allow taxis to use bus lanes	5	1%	1	1%	4	1%
Miscellaneous Suggestions for taxi trade (net)	49	6%	2	2%	45	7%
Ban taxis from London (ZEC/LPG/electric/diesel)	27	4%	2	2%	24	4%
Enforce proper tests/spot checks/MOTs for taxis	7	1%	0	0%	6	1%

	Total		Member of taxi trade		Not member of taxi trade	
Other miscellaneous suggestions for taxi trade mentions	16	2%	0	0%	16	2%
Suggestions for Other Transport (Grand Net)	206	27%	31	38%	174	26%
Economy (net)	22	3%	4	5%	18	3%
Congestion Charge (subnet)	10	1%	1	1%	9	1%
Increase Congestion Charge	4	1%	1	1%	3	0%
Other suggestions for other transport Congestion Charge mentions	6	1%	0	0%	6	1%
General Economy (subnet)	12	2%	3	4%	9	1%
Other suggestions for other transport general economy mentions	12	2%	3	4%	9	1%
Vehicle Fuel Source (net)	38	5%	6	7%	32	5%
Need more electric vehicle usage	22	3%	3	4%	19	3%
Conversion to LPG fuel	12	2%	2	2%	10	1%
Need more hybrid vehicle usage	7	1%	2	2%	5	1%
Need cleaner/bio diesel fuel vehicle usage	2	0%	1	1%	1	0%
Other vehicle fuel source mentions	4	1%	1	1%	3	0%
Vehicle Modifications (net)	10	1%	1	1%	9	1%
Conversion to Euro 6 standards	8	1%	0	0%	8	1%
Other vehicle modification mentions	2	0%	1	1%	1	0%
Reduce/Ban Vehicles (net)	47	6%	10	12%	37	6%
Reduce/ban PHVs	22	3%	7	9%	15	2%
Reduce/ban commercial vehicles (parcel/construction/diesel)	13	2%	1	1%	12	2%
Reduce/ban online app services	5	1%	2	2%	3	0%
Reduce/ban buses/empty buses	4	1%	1	1%	3	0%
Other reduce/ban vehicles mentions	7	1%	0	0%	7	1%
Discrimination/Bias (net)	26	3%	0	0%	26	4%
Biased/unfair/targets PHVs/puts pressure on PHV industry	21	3%	0	0%	21	3%
Other discrimination/bias mentions	6	1%	0	0%	6	1%
Traffic/Congestion (net)	33	4%	7	9%	25	4%
Encourage active forms of transport (walking, cycling)	19	3%	1	1%	17	3%

	Total		Member of taxi trade		Not member of taxi trade	
I support reducing congestion/London has too much traffic/congestion	4	1%	1	1%	3	0%
Cycle lanes/super highways cause traffic/congestion	3	0%	2	2%	1	0%
TfL/road schemes/projects contribute to traffic/congestion	3	0%	3	4%	0	0%
Reduce traffic/congestion by keeping roads open	2	0%	1	1%	1	0%
PHVs cause traffic/congestion	1	0%	1	1%	0	0%
Other traffic/congestion mentions	6	1%	0	0%	6	1%
Other Transport Pollution/Air Quality (net)	4	1%	0	0%	4	1%
Fix emissions standard/test for all vehicles regardless of age	1	0%	0	0%	1	0%
Reduce pollution by keeping roads open	1	0%	0	0%	1	0%
Other transport pollution/air quality mentions	2	0%	0	0%	2	0%
Road Infrastructure (net)	23	3%	9	11%	14	2%
Cycle Lanes (subnet)	15	2%	3	4%	12	2%
Eliminate/Get rid of cycle lanes	5	1%	3	4%	2	0%
Other cycle lanes mentions	10	1%	0	0%	10	1%
Road Signs/Traffic Lights (subnet)	1	0%	1	1%	0	0%
Change traffic light synchronisation	1	0%	1	1%	0	0%
Other road signs/traffic lights mentions	1	0%	1	1%	0	0%
General Road Infrastructure (subnet)	9	1%	7	9%	2	0%
Stop closing roads/Open up closed roads	7	1%	6	7%	1	0%
Other suggestions for other transport general road infrastructure mentions	2	0%	1	1%	1	0%
Electric Vehicle Infrastructure (net)	29	4%	4	5%	25	4%
Add electric charging stations	27	4%	4	5%	23	3%
Need rapid charging technology	8	1%	1	1%	7	1%
Increase battery life	2	0%	0	0%	2	0%
Other electric vehicle infrastructure mentions	1	0%	0	0%	1	0%
Miscellaneous Suggestions for Other Transport (net)	23	3%	2	2%	21	3%
Encourage use of public transportation	14	2%	1	1%	13	2%
Limit travel times for commercial/delivery vehicles	2	0%	1	1%	1	0%

	Total		Member of taxi trade		Not member of taxi trade	
Other miscellaneous suggestions for other transport mentions	9	1%	0	0%	9	1%
Miscellaneous Comments (Grand Net)	152	20%	17	21%	134	20%
General Pollution/Air Quality (net)	107	14%	12	15%	94	14%
Taxis contribute to pollution/air quality problems	84	11%	7	9%	76	11%
Buses contribute to pollution/air quality problems/more than taxis	12	2%	3	4%	9	1%
All vehicles/traffic/congestion contributes to pollution/air quality problems	5	1%	0	0%	5	1%
Improve scrapping scheme/scrapping scheme contributes to pollution	5	1%	1	1%	4	1%
Commercial vehicles contribute to pollution/air quality problems/more polluting taxis (parcel/construction)	2	0%	1	1%	1	0%
Cycle lanes/super highways contribute to pollution/air quality problems more than taxis	1	0%	1	1%	0	0%
PHVs contribute to pollution/air quality problems more than taxis	1	0%	1	1%	0	0%
Taxi emissions are small part of pollution/air quality problems	1	0%	0	0%	1	0%
TfL / TfL's road schemes contribute to pollution/air quality problems	1	0%	1	1%	0	0%
Other general pollution/air quality mentions	9	1%	1	1%	8	1%
Road Infrastructure (net)	2	0%	2	2%	0	0%
Concern about roadwork/roads in London	2	0%	2	2%	0	0%
Political Affiliation (net)	6	1%	0	0%	6	1%
Do not like/agree with the Mayor	2	0%	0	0%	2	0%
Other political affiliation mentions	4	1%	0	0%	4	1%
TfL Image (net)	6	1%	0	0%	6	1%
Do not like/agree with TfL	5	1%	0	0%	5	1%
Other TfL images mentions	1	0%	0	0%	1	0%
Additional Information Needed (net)	7	1%	1	1%	6	1%
No accuracy/relevant scientific figures to back this up	3	0%	1	1%	2	0%
Other additional information needed mentions	4	1%	0	0%	4	1%
Miscellaneous	32	4%	2	2%	30	4%
Concern proposals are money making/revenue raising schemes	4	1%	0	0%	4	1%

	Total		Member of taxi trade		Not member of taxi trade	
Other miscellaneous mentions	28	4%	2	2%	26	4%
Don't Know	4	1%	1	1%	3	0%
Nothing	10	1%	1	1%	9	1%
No Answer	5	1%	0	0%	5	1%

Figure 11: Question 3 Do you believe that we might be able to reduce NOx emissions from taxis by 65 per cent by 2025 in any other way? If so, how might we do so? (Those who *disagree* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

	Total		Member of taxi trade		Not member of taxi trade	
Base	2,005		1,499		463	
Overall Agreement/Disagreement (Grand Net)	182	9%	138	9%	39	8%
Don't believe emission will be reduced	106	5%	76	5%	25	5%
Believe emission will be reduced	55	3%	45	3%	10	2%
Reducing maximum age of taxis will not help reduce pollution/emissions levels	26	1%	21	1%	5	1%
Suggestions for taxi trade (Grand Net)	1,153	58%	890	59%	238	51%
Hardships Of Proposal (net)	184	9%	153	10%	28	6%
This would create hardships for taxi drivers	172	9%	144	10%	25	5%
Other hardships of proposal mentions	17	1%	14	1%	3	1%
Economy (net)	469	23%	367	24%	94	20%
Assistance/Grants (subnet)	282	14%	219	15%	58	13%
Offer assistance/grants/subsidy for taxis (ZEC/LPG/electric/diesel)	268	13%	209	14%	54	12%
Other suggestions for taxi trade assistance/grants mentions	17	1%	12	1%	5	1%
Congestion/ULEZ Charge (subnet)	14	1%	3	0%	10	2%
Taxis should pay Congestion Charge (ZEC/LPG/electric/diesel)	5	0%	1	0%	4	1%
Taxis should pay ULEZ charge (ZEC/LPG/electric/diesel)	5	0%	1	0%	3	1%
Other suggestions for taxi trade Congestion Charge/ULEZ mentions	5	0%	1	0%	4	1%
Other Economy Mentions (subnet)	226	11%	189	13%	34	7%
Reduce cost of taxis (ZEC/LPG/electric/diesel)	155	8%	130	9%	23	5%
Impacts on value/re-sale value of taxis	57	3%	50	3%	5	1%
Other suggestions for taxi trade other economy mentions	23	1%	15	1%	6	1%
Maximum Age Limit/Requirement (net)	489	24%	395	26%	83	18%

	Total		Member of taxi trade		Not member of taxi trade	
Unfair to change goalposts/maximum age limit	199	10%	173	12%	20	4%
Allow natural wastage of taxis/taxi fleet	144	7%	118	8%	23	5%
Keep maximum age of taxis at 15 years old	129	6%	112	7%	16	3%
Allow more time for age limit transition	36	2%	29	2%	7	2%
No age limit for electric taxis	30	1%	26	2%	4	1%
Reduce age limit of taxis sooner	12	1%	1	0%	11	2%
Reduce age limit of taxis (unspecified number of years old)	10	0%	6	0%	4	1%
Reduce age limit of taxis to 10 years/Same as PHVs	8	0%	3	0%	5	1%
Other suggestions for taxi trade maximum age limit/requirement mentions	28	1%	18	1%	7	2%
Taxi Fuel Source (net)	220	11%	168	11%	49	11%
Need more choice of taxi/no monopoly	128	6%	105	7%	21	5%
All taxis should be electric	33	2%	18	1%	15	3%
All taxis should be Euro 6 vehicles	18	1%	14	1%	4	1%
All taxis should be ZEC	13	1%	10	1%	3	1%
Retrofit technology to capture emission	13	1%	12	1%	1	0%
All taxis should be hybrids	6	0%	2	0%	4	1%
Other taxi fuel source mentions	21	1%	16	1%	4	1%
Number of taxis (net)	26	1%	17	1%	8	2%
Reduce amount of taxis (empty/plying for hire)	12	1%	7	0%	4	1%
Reduce/Cancel licence of/all high emission/taxis/vehicles	9	0%	6	0%	3	1%
Other number of taxis mentions	5	0%	4	0%	1	0%
Taxi Discrimination/Bias (net)	185	9%	131	9%	47	10%
Biased/unfair/targets taxis/puts pressure on taxi trade	184	9%	130	9%	47	10%
Other taxi discrimination/bias mentions	3	0%	3	0%	-	0%
Taxi Pollution/Air Quality (net)	34	2%	25	2%	9	2%
Stop/Eliminate taxis from idling	25	1%	17	1%	8	2%
Other taxi pollution/air quality mentions	9	0%	8	1%	1	0%

	Total		Member of taxi trade		Not member of taxi trade	
Bus Lanes (net)	32	2%	31	2%	1	0%
Allow taxis to use bus lanes	32	2%	31	2%	1	0%
Miscellaneous Suggestions for taxi trade (net)	50	2%	37	2%	12	3%
Enforce proper tests/spot checks/MOTs for taxis	18	1%	15	1%	3	1%
Ban taxis from London (ZEC/LPG/electric/diesel)	6	0%	2	0%	4	1%
Other miscellaneous suggestions for taxi trade mentions	26	1%	20	1%	5	1%
Suggestions for Other Transport (Grand Net)	1,086	54%	816	54%	245	53%
Economy (net)	32	2%	22	1%	9	2%
Congestion Charge (subnet)	18	1%	14	1%	4	1%
Increase Congestion Charge	12	1%	9	1%	3	1%
Other suggestions for other transport Congestion Charge mentions	7	0%	6	0%	1	0%
General Economy (subnet)	15	1%	8	1%	6	1%
Other suggestions for other transport general economy mentions	15	1%	8	1%	6	1%
Vehicle Fuel Source (net)	139	7%	105	7%	31	7%
Conversion to LPG fuel	65	3%	52	3%	11	2%
Need more electric vehicle usage	31	2%	22	1%	8	2%
Need cleaner/bio diesel fuel vehicle usage	17	1%	13	1%	3	1%
Need more hybrid vehicle usage	8	0%	7	0%	1	0%
Other vehicle fuel source mentions	30	1%	20	1%	10	2%
Vehicle Modifications (net)	110	5%	79	5%	29	6%
Conversion to Euro 6 standards	58	3%	46	3%	12	3%
Other vehicle modification mentions	53	3%	34	2%	17	4%
Reduce/Ban Vehicles (net)	440	22%	334	22%	98	21%
Reduce/ban PHVs	285	14%	223	15%	57	12%
Reduce/ban buses/empty buses	139	7%	105	7%	34	7%
Reduce/ban online app services	56	3%	40	3%	14	3%
Reduce/ban commercial vehicles (parcel/construction/diesel)	33	2%	23	2%	9	2%
Other reduce/ban vehicles mentions	26	1%	17	1%	8	2%

	Total		Member of taxi trade		Not member of taxi trade	
Discrimination/Bias (net)	19	1%	4	0%	14	3%
Biased/unfair/targets PHVs/puts pressure on PHV industry	14	1%	1	0%	12	3%
Other discrimination/bias mentions	5	0%	3	0%	2	0%
Traffic/Congestion (net)	209	10%	171	11%	31	7%
Reduce traffic/congestion by keeping roads open	69	3%	60	4%	6	1%
I support reducing congestion/London has too much traffic/congestion	65	3%	52	3%	11	2%
TfL/road schemes/projects contribute to traffic/congestion	53	3%	44	3%	8	2%
Cycle lanes/super highways cause traffic/congestion	25	1%	19	1%	5	1%
PHVs cause traffic/congestion	24	1%	21	1%	2	0%
Other traffic/congestion mentions	11	1%	8	1%	3	1%
Other Transport Pollution/Air Quality (net)	65	3%	50	3%	12	3%
Fix emissions standard/test for all vehicles regardless of age	24	1%	17	1%	6	1%
Reduce pollution by keeping roads open	19	1%	14	1%	3	1%
Other transport pollution/air quality mentions	22	1%	19	1%	3	1%
Road Infrastructure (net)	336	17%	278	19%	53	11%
Cycle Lanes (subnet)	173	9%	141	9%	30	6%
Eliminate/Get rid of cycle lanes	163	8%	132	9%	29	6%
Other cycle lanes mentions	14	1%	13	1%	1	0%
Road Signs/Traffic Lights (subnet)	37	2%	29	2%	7	2%
Change traffic light synchronisation	32	2%	26	2%	6	1%
Other road signs/traffic lights mentions	8	0%	5	0%	2	0%
General Road Infrastructure (subnet)	228	11%	195	13%	29	6%
Stop closing roads/Open up closed roads	168	8%	142	9%	23	5%
Stop eliminating/reducing road space	64	3%	57	4%	6	1%
Other suggestions for other transport general road infrastructure mentions	13	1%	11	1%	2	0%
Electric Vehicle Infrastructure (net)	142	7%	105	7%	34	7%
Add electric charging stations	124	6%	91	6%	31	7%
Need rapid charging technology	23	1%	18	1%	4	1%

Increase battery life	20	1%	15	1%	4	1%
Other electric vehicle infrastructure mentions	3	0%	2	0%	1	0%
Miscellaneous Suggestions for Other Transport (net)	49	2%	38	3%	11	2%
Limit travel times for commercial/delivery vehicles	19	1%	16	1%	3	1%
Encourage use of public transportation	11	1%	8	1%	3	1%
Other miscellaneous suggestions for other transport mentions	20	1%	14	1%	6	1%
Miscellaneous Comments (Grand Net)	573	29%	409	27%	142	31%
General Pollution/Air Quality (net)	263	13%	174	12%	84	18%
Buses contribute to pollution/air quality problems/more than taxis	100	5%	65	4%	35	8%
Taxi emissions are small part of pollution/air quality problems	77	4%	58	4%	18	4%
PHVs contribute to pollution/air quality problems more than taxis	28	1%	19	1%	9	2%
All vehicles/traffic/congestion contributes to pollution/air quality problems	23	1%	14	1%	9	2%
TfL's road schemes contribute to pollution/air quality problems	21	1%	16	1%	4	1%
Commercial vehicles contribute to pollution/air quality problems/more polluting taxis (parcel/construction)	18	1%	15	1%	3	1%
Cycle lanes/super highways contribute to pollution/air quality problems more than taxis	14	1%	10	1%	3	1%
Improve scrapping scheme/scrapping scheme contributes to pollution	13	1%	7	0%	5	1%
Taxis contribute to pollution/air quality problems	10	0%	2	0%	8	2%
Other general pollution/air quality mentions	20	1%	12	1%	7	2%
Road Infrastructure (net)	73	4%	53	4%	16	3%
Concern about roadwork/roads in London	72	4%	52	3%	16	3%
Other road infrastructure mentions	2	0%	2	0%	-	0%
Political Affiliation (net)	43	2%	28	2%	8	2%
Do not like/agree with the Mayor	20	1%	10	1%	5	1%
Learn lessons from past/don't repeat same mistakes	14	1%	10	1%	3	1%
Other political affiliation mentions	10	0%	8	1%	1	0%
TfL Image (net)	121	6%	92	6%	23	5%
Do not like/agree with TfL	113	6%	86	6%	22	5%
Other TfL images mentions	9	0%	7	0%	1	0%

	Total		Member of taxi trade		Not member of taxi trade	
Additional Information Needed (net)	108	5%	89	6%	17	4%
No accuracy/relevant scientific figures to back this up	108	5%	89	6%	17	4%
Other additional information needed mentions	1	0%	1	0%	-	0%
Miscellaneous	84	4%	56	4%	24	5%
Concern proposals are money making/revenue raising schemes	37	2%	25	2%	10	2%
Abusive comments	6	0%	4	0%	1	0%
Other miscellaneous mentions	42	2%	28	2%	13	3%
Don't Know	9	0%	7	0%	2	0%
Nothing	35	2%	24	2%	11	2%
No Answer	9	0%	6	0%	3	1%

Figure 12: Question 4 We propose that Euro 6, LPG and ZEC taxis would be subject to a 15 year age limit, in recognition of their lower levels of harmful air quality emissions. Do you have views about whether it is right to allow these taxis to have a 15 year age limit or do you believe there are other ways we could recognise the differing levels of emissions from taxis? If so, what are they? (all respondents)

	Total		Member of taxi trade		Not member of taxi trade	
Base	3013		1771		1205	
Overall Agreement/Disagreement (Net)	268	9%	150	8%	117	10%
Agree with proposal	122	4%	60	3%	62	5%
Disagree with proposal	81	3%	51	3%	29	2%
Agree, if they pass required tests/safety checks	60	2%	38	2%	22	2%
Other overall agreement/disagreement mentions	5	0%	1	0%	4	0%
Age Limit (Net)	2207	73%	1363	77%	818	68%
No Age Limit (Subnet)	1115	37%	786	44%	316	26%
Should be no age limit (ZEC/LPG/electric/diesel)	1000	33%	704	40%	285	24%
No age limit for taxis that pass required tests/safety checks	130	4%	95	5%	33	3%
Other no age limit mentions	1	0%	1	0%	0	0%
Same As Others Age Limit (Subnet)	109	4%	20	1%	88	7%
All taxi/engine types should have same age limit	53	2%	17	1%	35	3%
Taxis should have same age limit as PHVs (ZEC/LPG/electric/diesel)	44	1%	2	0%	42	3%
Other same as others age limit mentions	17	1%	2	0%	14	1%
Miscellaneous Age Limit (Subnet)	1091	36%	605	34%	472	39%
Should remain 15 years	487	16%	302	17%	180	15%
Unfair to change goalposts/maximum age limit	186	6%	138	8%	47	4%
Should be 20 years	124	4%	92	5%	30	2%
All taxis should have an extended age limit (12/20 years)	114	4%	76	4%	36	3%
All taxis should have a lower age limit (10/12 years)	88	3%	9	1%	78	6%
Should be 10 years	78	3%	9	1%	67	6%
	Total		Member of taxi		Not member of	

			trade		taxi trade	
Should be 12 years	31	1%	3	0%	28	2%
Should be 5 years	26	1%	5	0%	20	2%
Allow natural wastage of taxis/taxi fleet	20	1%	15	1%	5	0%
Other miscellaneous age limit mentions	86	3%	31	2%	54	4%
Hardships of Proposal (Net)	145	5%	106	6%	37	3%
Will create financial hardship (drivers/owners/trade)	75	2%	56	3%	18	1%
Will create hardship (drivers/owners/trade)	35	1%	26	1%	7	1%
Will create hardships for passengers	20	1%	12	1%	8	1%
Higher unemployment rate/job loss (drivers/owners/trade)	15	0%	10	1%	5	0%
Will impact people nearing retirement/force early retirement	14	0%	12	1%	2	0%
Other hardships of proposal mentions	2	0%	1	0%	1	0%
Economy (Net)	502	17%	331	19%	164	14%
Assistance/Grants (Subnet)	77	3%	47	3%	29	2%
Offer assistance/grants/subsidy to taxis (ZEC/LPG/electric)	74	2%	46	3%	27	2%
Other assistance/grants mentions	6	0%	2	0%	4	0%
Congestion/ULEZ Charge (Subnet)	50	2%	6	0%	42	3%
Tax/charge taxis according to level of emissions	14	0%	1	0%	13	1%
Taxis should pay ULEZ charge	14	0%	0	0%	12	1%
Other congestion/ULEZ charge mentions	25	1%	5	0%	19	2%
Cost/Value of Vehicles/taxis (Subnet)	393	13%	293	17%	96	8%
Taxis are too expensive to have a maximum age limit	330	11%	248	14%	78	6%
Impacts on value/re-sale value of taxis	53	2%	45	3%	8	1%
Taxis are expensive to upkeep/maintain (repairs/new batteries/insurance)	21	1%	16	1%	5	0%
Fuel conversion to taxis are expensive to make	18	1%	14	1%	4	0%
General Economy (Subnet)	18	1%	4	0%	14	1%
Other cost/value of vehicles/taxis mentions	11	0%	7	0%	4	0%
Other general economy mentions	18	1%	4	0%	14	1%

	Total		Member of taxi trade		Not member of taxi trade	
Vehicle/Taxi Fuel Source (Net)	228	8%	119	7%	106	9%
Need more alternative fuel source vehicle usage (electric/hybrid/LPG)	132	4%	53	3%	77	6%
Need more choice of taxi/no monopoly	80	3%	62	4%	17	1%
Other vehicle/Taxi fuel source mentions	20	1%	7	0%	13	1%
Pollution/Air Quality (Net)	429	14%	228	13%	196	16%
Taxis are less polluting than other vehicles	248	8%	167	9%	79	7%
Taxis pollute/are more polluting than other vehicles	68	2%	10	1%	57	5%
I support reducing emissions/London has too much pollution/poor air quality	41	1%	12	1%	28	2%
Manufacturing vehicles create pollution / is more polluting	22	1%	13	1%	9	1%
Buses contribute to pollution/air quality problems/more than taxis	19	1%	11	1%	7	1%
Stop/Eliminate vehicles from idling	15	0%	5	0%	10	1%
Scrapping/disposal of vehicles/parts of vehicles is polluting/bad for the environment	14	0%	7	0%	6	0%
Other pollution/air quality mentions	43	1%	24	1%	19	2%
Reduce/Ban Vehicles (Net)	104	3%	47	3%	57	5%
Reduce/ban PHVs	44	1%	31	2%	13	1%
Reduce/ban taxis from London	29	1%	4	0%	25	2%
Other reduce/ban vehicles mentions	39	1%	13	1%	26	2%
Road Infrastructure (Net)	27	1%	15	1%	12	1%
Concerns about roadwork (closed roads)	14	0%	10	1%	4	0%
Other road infrastructure mentions	15	0%	7	0%	8	1%
Discrimination/Bias (Net)	85	3%	52	3%	31	3%
Biased/unfair/targets taxis/puts pressure on taxi trade	70	2%	50	3%	19	2%
Other discrimination/bias mentions	16	1%	2	0%	13	1%
TfL Image (Net)	57	2%	35	2%	19	2%
Do not like/agree with TfL/not fit for job	28	1%	17	1%	9	1%
Other TfL image mentions	31	1%	18	1%	12	1%

	Total		Member of taxi trade		Not member of taxi trade	
Political Affiliation (Net)	21	1%	12	1%	8	1%
Do not like/agree with the Mayor/not fit for job	11	0%	6	0%	5	0%
Other political affiliation mentions	11	0%	7	0%	3	0%
Electric Vehicle Infrastructure (Net)	48	2%	38	2%	10	1%
Add/install/more electric charging stations	35	1%	26	1%	9	1%
Poor quality electric batteries (mile range/longevity in years)	17	1%	15	1%	2	0%
Other electric vehicle infrastructure mention	2	0%	2	0%	0	0%
Information Needed (Net)	33	1%	18	1%	13	1%
No accuracy/relevant scientific figures to back this up	28	1%	16	1%	11	1%
Other information needed mentions	6	0%	2	0%	3	0%
Traffic/Congestion (Net)	30	1%	18	1%	12	1%
I support reducing congestion/London has too much traffic/congestion	16	1%	8	0%	8	1%
Other traffic/congestion mentions	17	1%	11	1%	6	0%
Vehicle/taxi Quality/Modifications (Net)	76	3%	36	2%	38	3%
Allow retrofitting/modifications to taxis	26	1%	16	1%	10	1%
Poor quality manufactured vehicles/taxis	21	1%	10	1%	10	1%
Use advance technology in manufacturing of taxis	21	1%	8	0%	13	1%
Other vehicle/taxi quality/modifications mentions	13	0%	6	0%	6	0%
Miscellaneous (Net)	110	4%	46	3%	61	5%
Enforce stricter/proper tests/spot checks/MOTs	41	1%	13	1%	28	2%
Proposal is a money making/revenue raising scheme	17	1%	12	1%	4	0%
Abusive comments	3	0%	3	0%	0	0%
Other miscellaneous mentions	52	2%	19	1%	31	3%
Don't Know	11	0%	6	0%	5	0%
No Answer	76	3%	46	3%	28	2%

Figure 13: Question 4 We propose that Euro 6, LPG and ZEC taxis would be subject to a 15 year age limit, in recognition of their lower levels of harmful air quality emissions. Do you have views about whether it is right to allow these taxis to have a 15 year age limit or do you believe there are other ways we could recognise the differing levels of emissions from taxis? If so, what are they?

(Those who agree with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

	Total		Member of taxi trade		Not member of taxi trade	
Base	608		75		524	
Overall Agreement/Disagreement (Net)	88	14%	15	20%	73	14%
Agree with proposal	53	9%	7	9%	46	9%
Disagree with proposal	17	3%	5	7%	12	2%
Agree, if they pass required tests/safety checks	15	2%	3	4%	12	2%
Other overall agreement/disagreement mentions	3	0%	0	0%	3	1%
Age Limit (Net)	352	58%	44	59%	300	57%
No Age Limit (Subnet)	30	5%	10	13%	19	4%
Should be no age limit (ZEC/LPG/electric)	27	4%	9	12%	17	3%
No age limit for taxis that pass required tests/safety checks	3	0%	1	1%	2	0%
Same as Others Age Limit (Subnet)	57	9%	1	1%	55	10%
Taxis should have same age limit as PHVs (ZEC/LPG/electric)	38	6%	1	1%	37	7%
All taxi/engine types should have same age limit	11	2%	0	0%	10	2%
Other same as others age limit mentions	11	2%	0	0%	10	2%
Miscellaneous Age Limit (Subnet)	285	47%	36	48%	243	46%
All taxis should have a lower age limit (10/12 years)	74	12%	0	0%	73	14%
Should be 10 years	69	11%	8	11%	59	11%
Should remain 15 years	49	8%	11	15%	37	7%
Should be 12 years	31	5%	3	4%	28	5%
Should be 5 years	22	4%	4	5%	17	3%

	Total		Member of taxi trade		Not member of taxi trade	
All taxis should have an extended age limit (12/20 years)	13	2%	3	4%	10	2%
Should be 20 years	5	1%	4	5%	1	0%
Unfair to change goalposts/maximum age limit	3	0%	1	1%	2	0%
Allow natural wastage of taxis/taxi fleet	1	0%	0	0%	1	0%
Other miscellaneous age limit mentions	49	8%	3	4%	45	9%
Hardships of Proposal (Net)	9	1%	3	4%	6	1%
Will create financial hardship (drivers/owners/trade)	3	0%	0	0%	3	1%
Will create hardship (drivers/owners/trade)	3	0%	2	3%	1	0%
Higher unemployment rate/job loss (drivers/owners/trade)	1	0%	0	0%	1	0%
Will create hardships for passengers	1	0%	0	0%	1	0%
Will impact people nearing retirement/force early retirement	1	0%	1	1%	0	0%
Economy (Net)	81	13%	16	21%	62	12%
Assistance/Grants (Subnet)	18	3%	3	4%	14	3%
Offer assistance/grants/subsidy to taxis (ZEC/LPG/electric)	16	3%	3	4%	12	2%
Other assistance/grants mentions	4	1%	0	0%	4	1%
Congestion/ULEZ Charge (Subnet)	36	6%	2	3%	33	6%
Tax/charge taxis according to level of emissions	12	2%	0	0%	12	2%
Taxis should pay ULEZ charge	12	2%	0	0%	11	2%
Other congestion/ULEZ charge mentions	15	2%	2	3%	12	2%
Cost/Value of vehicles/taxis (Subnet)	26	4%	11	15%	14	3%
Taxis are too expensive to have a maximum age limit	18	3%	9	12%	8	2%
General Economy (Subnet)	8	1%	1	1%	7	1%
Fuel conversion to taxis are expensive to make	5	1%	2	3%	3	1%
Impacts on value/re-sale value of taxis	2	0%	1	1%	1	0%
Other cost/value of vehicles/taxis mentions	2	0%	0	0%	2	0%
Taxis are expensive to upkeep/maintain (repairs/new batteries/insurance)	1	0%	0	0%	1	0%
Other general economy mentions	8	1%	1	1%	7	1%

	Total		Member of taxi trade		Not member of taxi trade	
Vehicle/Taxi Fuel Source (Net)	74	12%	4	5%	69	13%
Need more alternative fuel source vehicle usage (electric/hybrid/LPG)	60	10%	2	3%	57	11%
Need more choice of taxi/no monopoly	4	1%	2	3%	2	0%
Other vehicle/Taxi fuel source mentions	11	2%	0	0%	11	2%
Pollution/Air Quality (Net)	120	20%	14	19%	105	20%
Taxis pollute/are more polluting than other vehicles	52	9%	3	4%	49	9%
Taxis are less polluting than other vehicles	30	5%	9	12%	21	4%
I support reducing emissions/London has too much pollution/poor air quality	22	4%	1	1%	21	4%
Stop/Eliminate vehicles from idling	7	1%	1	1%	6	1%
Buses contribute to pollution/air quality problems/more than taxis	3	0%	0	0%	2	0%
Manufacturing vehicles create pollution / is more polluting	2	0%	0	0%	2	0%
Scrapping/disposal of vehicles/parts of vehicles is polluting/bad for the environment	2	0%	0	0%	2	0%
Other pollution/air quality mentions	7	1%	0	0%	7	1%
Reduce/Ban Vehicles (Net)	47	8%	5	7%	42	8%
Reduce/ban taxis from London	22	4%	0	0%	22	4%
Reduce/ban PHVs	8	1%	3	4%	5	1%
Other reduce/ban vehicles mentions	24	4%	2	3%	22	4%
Road Infrastructure (Net)	3	0%	0	0%	3	1%
Other road infrastructure mentions	3	0%	0	0%	3	1%
Discrimination/Bias (Net)	15	2%	3	4%	12	2%
Biased/unfair/targets taxis/puts pressure on taxi trade	7	1%	3	4%	4	1%
Other discrimination/bias mentions	8	1%	0	0%	8	2%
TfL Image (Net)	8	1%	0	0%	8	2%
Do not like/agree with TfL/not fit for job	2	0%	0	0%	2	0%
Other TfL image mentions	6	1%	0	0%	6	1%
Political Affiliation (Net)	5	1%	0	0%	5	1%
Do not like/agree with the Mayor/not fit for job	3	0%	0	0%	3	1%

	Total		Member of taxi trade		Not member of taxi trade	
Other political affiliation mentions	2	0%	0	0%	2	0%
Electric Vehicle Infrastructure (Net)	3	0%	2	3%	1	0%
Add/install/more electric charging stations	2	0%	1	1%	1	0%
Poor quality electric batteries (mile range/longevity in years)	1	0%	1	1%	0	0%
Information Needed (Net)	6	1%	1	1%	5	1%
No accuracy/relevant scientific figures to back this up	6	1%	1	1%	5	1%
Other information needed mentions	1	0%	0	0%	1	0%
Traffic/Congestion (Net)	2	0%	0	0%	2	0%
Other traffic/congestion mentions	2	0%	0	0%	2	0%
Vehicle/taxi Quality/Modifications (Net)	27	4%	2	3%	25	5%
Use advance technology in manufacturing of taxis	10	2%	0	0%	10	2%
Allow retrofitting/modifications to taxis	6	1%	1	1%	5	1%
Poor quality manufactured vehicles/taxis	6	1%	0	0%	6	1%
Other vehicle/taxi quality/modifications mentions	6	1%	1	1%	5	1%
Miscellaneous (Net)	41	7%	1	1%	40	8%
Enforce stricter/proper tests/spot checks/MOTs	24	4%	0	0%	24	5%
Proposal is a money making/revenue raising scheme	2	0%	0	0%	2	0%
Other miscellaneous mentions	15	2%	1	1%	14	3%
Don't Know	5	1%	0	0%	5	1%
No Answer	15	2%	1	1%	14	3%

Figure 14: Question 4 We propose that Euro 6, LPG and ZEC taxis would be subject to a 15 year age limit, in recognition of their lower levels of harmful air quality emissions. Do you have views about whether it is right to allow these taxis to have a 15 year age limit or do you believe there are other ways we could recognise the differing levels of emissions from taxis? If so, what are they?

(Those who *disagree* with the proposals to reduce taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles)

	Total		Member of taxi trade		Not member of taxi trade	
Base	2,369		1,681		662	
Overall Agreement/Disagreement (Net)	176	7%	134	8%	41	6%
Agree with proposal	66	3%	52	3%	14	2%
Disagree with proposal	64	3%	46	3%	17	3%
Agree, if they pass required tests/safety checks	44	2%	35	2%	9	1%
Other overall agreement/disagreement mentions	2	0%	1	0%	1	0%
Age Limit (Net)	1,834	77%	1,308	78%	508	77%
No Age Limit (Subnet)	1,077	45%	772	46%	293	44%
Should be no age limit	968	41%	693	41%	265	40%
No age limit for taxis that pass required tests/safety checks	124	5%	92	5%	30	5%
Other no age limit mentions	1	0%	1	0%	-	0%
Same as Others Age Limit (Subnet)	50	2%	18	1%	32	5%
All taxi/engine types should have same age limit	40	2%	16	1%	24	4%
Taxis should have same age limit as PHVs	6	0%	1	0%	5	1%
Other same as others age limit mentions	6	0%	2	0%	4	1%
Miscellaneous Age Limit (Subnet)	795	34%	563	33%	224	34%
Should remain 15 years	435	18%	290	17%	141	21%
Unfair to change goalposts/maximum age limit	181	8%	136	8%	44	7%
Should be 20 years	118	5%	87	5%	29	4%
All taxis should have an extended age limit (12/20 years)	99	4%	71	4%	26	4%
Allow natural wastage of taxis/taxi fleet	19	1%	15	1%	4	1%

	Total		Member of taxi trade		Not member of taxi trade	
All taxis should have a lower age limit (10/12 years)	13	1%	8	0%	5	1%
Should be 10 years	8	0%	1	0%	7	1%
Should be 5 years	4	0%	1	0%	3	0%
Other miscellaneous age limit mentions	36	2%	28	2%	8	1%
Hardships of Proposal (Net)	134	6%	103	6%	29	4%
Will create financial hardship (drivers/owners/trade)	72	3%	56	3%	15	2%
Will create hardship (drivers/owners/trade)	31	1%	24	1%	5	1%
Will create hardships for passengers	18	1%	12	1%	6	1%
Higher unemployment rate/job loss (drivers/owners/trade)	14	1%	10	1%	4	1%
Will impact people nearing retirement/force early retirement	13	1%	11	1%	2	0%
Other hardships of proposal mentions	2	0%	1	0%	1	0%
Economy (Net)	413	17%	312	19%	97	15%
Assistance/Grants (Subnet)	57	2%	43	3%	14	2%
Offer assistance/grants/subsidy to taxis (ZEC/LPG/electric)	56	2%	42	2%	14	2%
Other assistance/grants mentions	2	0%	2	0%	-	0%
Congestion/ULEZ Charge (Subnet)	12	1%	4	0%	7	1%
Taxis should pay ULEZ charge	2	0%	-	0%	1	0%
Tax/charge taxis according to level of emissions	1	0%	1	0%	-	0%
Other congestion/ULEZ charge mentions	9	0%	3	0%	6	1%
Cost/Value of vehicles/taxis (Subnet)	362	15%	279	17%	80	12%
Taxis are too expensive to have a maximum age limit	309	13%	238	14%	68	10%
Impacts on value/re-sale value of taxis	50	2%	43	3%	7	1%
Taxis are expensive to upkeep/maintain (repairs/new batteries/insurance)	19	1%	15	1%	4	1%
Fuel conversion to taxis are expensive to make	13	1%	12	1%	1	0%
General Economy (Subnet)	10	0%	3	0%	7	1%
Other cost/value of vehicles/taxis mentions	8	0%	6	0%	2	0%
Other general economy mentions	10	0%	3	0%	7	1%

	Total		Member of taxi trade		Not member of taxi trade	
Vehicle/Taxi Fuel Source (Net)	153	6%	114	7%	37	6%
Need more choice of taxi/no monopoly	76	3%	60	4%	15	2%
Need more alternative fuel source vehicle usage (electric/hybrid/LPG)	71	3%	50	3%	20	3%
Other vehicle/Taxi fuel source mentions	9	0%	7	0%	2	0%
Pollution/Air Quality (Net)	304	13%	212	13%	88	13%
Taxis are less polluting than other vehicles (ZEC/LPG/electric)	216	9%	157	9%	57	9%
I support reducing emissions/London has too much pollution/poor air quality	18	1%	11	1%	6	1%
Manufacturing vehicles create pollution / is more polluting	18	1%	12	1%	6	1%
Buses contribute to pollution/air quality problems/more than taxis	16	1%	11	1%	5	1%
Taxis pollute/are more polluting than other vehicles	16	1%	7	0%	8	1%
Scrapping/disposal of vehicles/parts of vehicles is polluting/bad for the environment	12	1%	7	0%	4	1%
Stop/Eliminate vehicles from idling	8	0%	4	0%	4	1%
Other pollution/air quality mentions	36	2%	24	1%	12	2%
Reduce/Ban Vehicles (Net)	53	2%	40	2%	13	2%
Reduce/ban PHVs	35	1%	28	2%	7	1%
Reduce/ban taxis from London	5	0%	2	0%	3	0%
Other reduce/ban vehicles mentions	14	1%	11	1%	3	0%
Road Infrastructure (Net)	23	1%	15	1%	8	1%
Concerns about roadwork (closed roads)	14	1%	10	1%	4	1%
Other road infrastructure mentions	11	0%	7	0%	4	1%
Discrimination/Bias (Net)	67	3%	48	3%	18	3%
Biased/unfair/targets taxis/puts pressure on taxi trade	61	3%	46	3%	14	2%
Other discrimination/bias mentions	7	0%	2	0%	5	1%
TfL Image (Net)	47	2%	35	2%	9	1%
Do not like/agree with TfL/not fit for job	25	1%	17	1%	6	1%
Other TfL image mentions	24	1%	18	1%	5	1%

	Total		Member of taxi trade		Not member of taxi trade	
Political Affiliation (Net)	16	1%	12	1%	3	0%
Do not like/agree with the Mayor/not fit for job	8	0%	6	0%	2	0%
Other political affiliation mentions	9	0%	7	0%	1	0%
Electric Vehicle Infrastructure (Net)	42	2%	35	2%	7	1%
Add/install/more electric charging stations	30	1%	24	1%	6	1%
Poor quality electric batteries (mile range/longevity in years)	16	1%	14	1%	2	0%
Other electric vehicle infrastructure mention	2	0%	2	0%	-	0%
Information Needed (Net)	26	1%	17	1%	7	1%
No accuracy/relevant scientific figures to back this up	22	1%	15	1%	6	1%
Other information needed mentions	4	0%	2	0%	1	0%
Traffic/Congestion (Net)	28	1%	18	1%	10	2%
I support reducing congestion/London has too much traffic/congestion	16	1%	8	0%	8	1%
Other traffic/congestion mentions	15	1%	11	1%	4	1%
Vehicle/taxi Quality/Modifications (Net)	48	2%	33	2%	13	2%
Allow retrofitting/modifications to taxis	19	1%	14	1%	5	1%
Poor quality manufactured vehicles/taxis	15	1%	10	1%	4	1%
Use advance technology in manufacturing of taxis	11	0%	8	0%	3	0%
Other vehicle/taxi quality/modifications mentions	7	0%	5	0%	1	0%
Miscellaneous (Net)	67	3%	45	3%	19	3%
Enforce stricter/proper tests/spot checks/MOTs	17	1%	13	1%	4	1%
Proposal is a money making/revenue raising scheme	14	1%	12	1%	1	0%
Abusive comments	3	0%	3	0%	-	0%
Other miscellaneous mentions	36	2%	18	1%	16	2%
Don't Know	5	0%	5	0%	-	0%
No Answer	60	3%	45	3%	14	2%

Figure 15: Question 5 Do you believe that this proposal would cause any additional impacts that we should bear in mind? If you have thoughts about how we might mitigate these impacts please also set them out below (all respondents)

	Total		Member of taxi trade		Not member of taxi trade	
Base	1,928		1,216		687	
Overall Agreement/Disagreement (Net)	295	15%	134	11%	157	23%
Will not cause additional impacts	210	11%	91	7%	116	17%
Proposal will cause additional impacts	46	2%	18	1%	27	4%
Don't remove the hardship exemption	39	2%	25	2%	14	2%
Hardships of Proposal (Net)	1,042	54%	746	61%	283	41%
Will impact people nearing retirement/force early retirement	607	31%	425	35%	179	26%
Will create hardship for part time/less mileage drivers	195	10%	109	9%	85	12%
Will create financial hardships	181	9%	143	12%	33	5%
Will create hardship (Unspecified)	123	6%	93	8%	27	4%
Will hurt/kill the taxi trade/industry	82	4%	64	5%	16	2%
Higher unemployment rate/job loss	63	3%	47	4%	14	2%
Passengers will have a hard time finding taxis/less on roads	19	1%	15	1%	4	1%
Will create hardship for garages/Put garages out of business	16	1%	14	1%	1	0%
Other hardships of proposal mentions	50	3%	40	3%	9	1%
Economy (Net)	308	16%	236	19%	67	10%
Assistance/Grants (Subnet)	109	6%	69	6%	38	6%
Offer assistance/grants/subsidy to taxis (ZEC/LPG/electric)	93	5%	58	5%	34	5%
Other assistance/grants mentions	17	1%	11	1%	5	1%
Cost/Value of vehicles/taxis (Subnet)	204	11%	178	15%	23	3%
Taxis are too expensive to buy/rent (ZEC/LPG/electric)	143	7%	126	10%	15	2%
Impacts on value/re-sale value (ZEC/LPG/electric)	65	3%	58	5%	6	1%
Other cost/value of vehicles/taxis mentions	10	1%	7	1%	3	0%

	Total		Member of taxi trade		Not member of taxi trade	
General Economy (Subnet)	12	1%	5	0%	7	1%
Other general economy mentions	12	1%	5	0%	7	1%
Pollution/Air Quality (Net)	89	5%	35	3%	54	8%
Success of Pollution Reduction (Subnet)	32	2%	8	1%	24	3%
Removing exemptions will help reduce pollution/emissions levels	26	1%	6	0%	20	3%
Other successful of pollution reduction mentions	6	0%	2	0%	4	1%
General Pollution/Air Quality (Subnet)	58	3%	28	2%	30	4%
Buses contribute to pollution/air quality problems/more than taxis	22	1%	14	1%	8	1%
Taxis contribute to pollution/air quality problems	10	1%	1	0%	9	1%
Other general pollution/air quality mentions	31	2%	14	1%	17	2%
Traffic/Congestion (Net)	19	1%	10	1%	9	1%
I support reducing congestion/London has too much traffic/congestion	10	1%	6	0%	4	1%
Other traffic/congestion mentions	12	1%	6	0%	6	1%
Vehicle/Taxi Fuel Source (Net)	95	5%	64	5%	31	5%
Cleaner fuel source such as LPG	30	2%	22	2%	8	1%
More electric chargers/rapid chargers/free chargers/taxi only chargers	20	1%	14	1%	6	1%
Upgrade to Euro 6/conversions available/retrofit/exhaust (Euro 3,4,5 taxis)	18	1%	13	1%	5	1%
Vehicle testing/Mots/Allows all cabs which clear test	14	1%	10	1%	4	1%
Other vehicle/taxi source mentions	21	1%	11	1%	10	1%
Age Limit (Net)	178	9%	144	12%	34	5%
Unfair to change goalposts/age limit	109	6%	97	8%	12	2%
Should remain at 15 years/not be changed at all	36	2%	29	2%	7	1%
Other age limit mentions	43	2%	28	2%	15	2%
Reduce/Ban Vehicles (Net)	81	4%	60	5%	21	3%
Reduce/ban PHVs	61	3%	51	4%	10	1%
Other reduce/ban vehicles mentions	22	1%	11	1%	11	2%

	Total		Member of taxi trade		Not member of taxi trade	
Road Infrastructure (Net)	26	1%	17	1%	9	1%
Concerns about cycle lanes (poor planning/not needed)	13	1%	7	1%	6	1%
Concerns about roadwork (closed roads/night work)	13	1%	11	1%	2	0%
Other road infrastructure mentions	8	0%	5	0%	3	0%
Discrimination/Bias (Net)	153	8%	82	7%	69	10%
Biased/unfair/targets taxis/puts pressure on taxi trade	111	6%	72	6%	38	6%
Other discrimination/bias mentions	47	2%	12	1%	34	5%
TfL Image (Net)	76	4%	49	4%	25	4%
Do not like/agree with TfL/not fit for job	50	3%	33	3%	15	2%
Concern proposals are money making/revenue raising schemes	14	1%	8	1%	6	1%
Other TfL image mentions	20	1%	13	1%	7	1%
Miscellaneous (Net)	141	7%	85	7%	53	8%
Need more choice of vehicles/never had choice earlier	34	2%	31	3%	3	0%
Need more accurate data	23	1%	18	1%	5	1%
Allow natural wastage of taxis/taxi fleet	16	1%	12	1%	3	0%
Abusive comments	7	0%	6	0%	1	0%
Other miscellaneous mentions	67	3%	23	2%	41	6%
Don't Know	37	2%	24	2%	13	2%
No Answer	81	4%	52	4%	29	4%

Figure 16: Question 6 We believe that our age limit proposals would affect most drivers of Euro 3, 4 and 5 taxis. We have published an Integrated Impact Assessment, describing in detail the impacts our proposals could cause. Please let us know if you have any comments on our Integrated Impact Assessment including any additional impacts or any other groups that may be affected by our proposals and any potential mitigating measures. Additionally, if you have any other comments about any of our other proposals, please record them below (all respondents)

	Total		Member of taxi trade		Not member of taxi trade	
Base	2,536		1,543		775	
Overall Agreement/Disagreement (Net)	277	11%	114	7%	111	14%
Disagree with proposal/Bad to implement	169	7%	95	6%	47	6%
Agree with proposal/Good to implement	108	4%	19	1%	64	8%
Age Limit (Net)	526	21%	286	19%	154	20%
15 Year Age Limit (Subnet)	214	8%	103	7%	79	10%
Should remain at 15 years/not be changed at all	205	8%	99	6%	76	10%
Other 15 year age limit mentions	10	0%	4	0%	4	1%
Miscellaneous Age Limit (Subnet)	379	15%	231	15%	83	11%
Unfair to change goalposts/maximum age limit	283	11%	204	13%	44	6%
Taxis should have same age limit as PHVs (ZEC/LPG/electric)	23	1%	2	0%	13	2%
Other miscellaneous age limit mentions	76	3%	26	2%	28	4%
Hardships of Proposal (Net)	578	23%	431	28%	94	12%
Will create financial hardship (drivers/owners/trade)	235	9%	178	12%	37	5%
Will create hardship (drivers/owners/trade)	205	8%	138	9%	41	5%
Will impact people nearing retirement/force early retirement	105	4%	80	5%	10	1%
Higher unemployment rate/job loss (drivers/owners/trade)	69	3%	58	4%	6	1%
Will create hardship for mechanics/put garages out of business	30	1%	24	2%	5	1%
Passengers will have a hard time finding taxis/less on roads	29	1%	19	1%	8	1%
Will create stress/mental strain (drivers/owners)	17	1%	13	1%	3	0%

	Total		Member of taxi trade		Not member of taxi trade	
Other hardships of proposal mentions	44	2%	32	2%	10	1%
Economy (Net)	507	20%	345	22%	106	14%
Assistance/Grants (Subnet)	180	7%	120	8%	47	6%
Offer assistance/grants/subsidy to taxis (ZEC/LPG/electric)	136	5%	92	6%	33	4%
Assess/offer assistance/grants for conversion to Euro 6 (Euro 3,4,5 taxis)	21	1%	13	1%	8	1%
Other assistance/grants mentions	26	1%	15	1%	9	1%
Congestion Charge (Subnet)	57	2%	12	1%	26	3%
ULEZ charge mentions	34	1%	6	0%	21	3%
Taxis should pay congestion charge (ZEC/LPG/electric)	23	1%	4	0%	12	2%
Other congestion charge mentions	11	0%	2	0%	2	0%
Cost/Value of Vehicles/taxis (Subnet)	303	12%	241	16%	31	4%
Taxis are too expensive (ZEC/LPG/electric)	160	6%	118	8%	20	3%
Impacts on value/re-sale value of taxis	129	5%	113	7%	10	1%
Unaffordable rent price for taxis (ZEC/electric)	32	1%	29	2%	1	0%
Other cost/value of vehicles/taxis mentions	25	1%	18	1%	4	1%
General Economy (Subnet)	12	0%	4	0%	7	1%
Other general economy mentions	12	0%	4	0%	7	1%
Pollution/Air Quality (Net)	164	6%	61	4%	78	10%
Taxis/black cabs contribute to pollution/air quality problems	65	3%	5	0%	48	6%
Buses contribute to pollution/air quality problems/more than taxis	33	1%	15	1%	11	1%
Reduce pollution by keeping roads open	32	1%	19	1%	8	1%
Other pollution/air quality mentions	49	2%	26	2%	19	2%
Reduce/Ban Vehicles (Net)	169	7%	83	5%	63	8%
Reduce/ban PHVs	104	4%	61	4%	27	3%
Reduce/ban taxis	28	1%	5	0%	20	3%
Reduce/ban buses/empty buses	21	1%	12	1%	9	1%
Reduce Euro 3,4,5 vehicles	14	1%	5	0%	7	1%
Other reduce/ban vehicles mentions	21	1%	11	1%	8	1%

	Total		Member of taxi trade		Not member of taxi trade	
Traffic/Congestion (Net)	44	2%	25	2%	13	2%
PHVs contribute to London traffic/congestion problem	20	1%	9	1%	9	1%
Other traffic/congestion mentions	26	1%	17	1%	5	1%
Vehicle/Taxi Fuel Source (Net)	920	36%	590	38%	307	40%
Upgrade to Euro 6/conversions available/retrofit/exhaust (Euro 3,4,5 taxis)	775	31%	512	33%	260	34%
More electric chargers/rapid chargers/free chargers/taxi only chargers	54	2%	32	2%	9	1%
All taxis should be electric/converted to electric	23	1%	6	0%	16	2%
Cleaner fuel sources such as LPG/Bio-fuels	23	1%	14	1%	7	1%
Other vehicle/taxi fuel source mentions	61	2%	36	2%	21	3%
Safety/Health (Net)	28	1%	5	0%	20	3%
Taxi drives are dangerous/lack driving skills	14	1%	3	0%	8	1%
Other safety/health mentions	16	1%	2	0%	14	2%
Road Infrastructure (Net)	65	3%	26	2%	25	3%
Provide access to cycle/bus lanes	28	1%	11	1%	9	1%
Concerns about roadwork (closed roads)	27	1%	14	1%	7	1%
Other road infrastructure mentions	20	1%	6	0%	11	1%
Discrimination/Bias (Net)	242	10%	123	8%	71	9%
Biased/unfair/targets taxis/puts pressure on taxi trade	158	6%	97	6%	39	5%
Biased/unfair/targets PHVs/puts pressure on PHV industry	20	1%	-	0%	10	1%
This will create monopoly for taxis/reduce competition	17	1%	2	0%	10	1%
Unfair to reduce Euro 5 engine vehicle	15	1%	14	1%	1	0%
Other discrimination/bias mentions	42	2%	11	1%	17	2%
TfL Image (Net)	152	6%	70	5%	27	3%
Do not like/agree with TfL/not fit for job	133	5%	64	4%	25	3%
Other TfL image mentions	25	1%	9	1%	3	0%
Political Affiliation (Net)	51	2%	22	1%	15	2%
Do not like/agree with the Mayor/not fit for job	40	2%	19	1%	10	1%
Other political affiliation mentions	12	0%	3	0%	6	1%

	Total		Member of taxi trade		Not member of taxi trade	
Information Needed (Net)	55	2%	40	3%	12	2%
No accuracy/relevant scientific figures to back this up	48	2%	35	2%	10	1%
Other information needed mentions	10	0%	7	0%	2	0%
Miscellaneous (Net)	228	9%	155	10%	36	5%
Provide choice of vehicles	74	3%	49	3%	12	2%
Natural wastage of vehicles	43	2%	35	2%	3	0%
Proposal is a money making/revenue raising scheme	35	1%	21	1%	4	1%
Scrapping causes more harm	18	1%	8	1%	3	0%
Abusive comments	4	0%	2	0%	2	0%
Other miscellaneous mentions	77	3%	54	3%	13	2%
Don't Know	8	0%	6	0%	2	0%
No Answer	97	4%	62	4%	33	4%

Appendix B: Consultation questions

Questionnaire

We have explained that we must reduce NOx emissions from taxis by 65 per cent by 2025. NOx gases are harmful to human health and contribute to climate change. The UK is also legally required to meet environmental 'limit values' on emissions, including NOx emissions.

1, Do you agree that taxis should play their part in reducing harmful NOx emissions in London?

Yes
No
Don't know

2, Do you agree that we should mandate the maximum taxi operating age? This would ensure that no taxi is licenced to operate over its relevant maximum age limit (e.g. into its 16th year under the current 15 year age limit).

Yes
No
Don't know

3, We propose reducing taxi NOx emissions by reducing the maximum taxi age limit for Euro 3, 4 and 5 vehicles in phases to 12 years by 2022. We would do so by reducing the maximum age limit for taxis by one year, each year, until then. Do you agree with the proposal to reduce the age limit for Euro 3, 4 and 5 taxis?

Yes
No
Don't know

Do you believe that we might be able to reduce NOx emissions from taxis by 65 per cent by 2025 in any other way? If so, how might we do so?

Free text box

4, We propose that Euro 6, LPG and ZEC taxis would be subject to a 15 year age limit, in recognition of their lower levels of harmful air quality emissions. Do you have views about whether it is right to allow these taxis to have a 15 year age limit or do you believe there are other ways we could recognise the differing levels of emissions from taxis? If so, what are they?

Free text box

5, We propose to remove the alternative fuel, historic and classic/niche, and hardship taxi age limit exemptions. The potential impacts of these proposals have

been assessed in an Integrated Impact Assessment. Do you agree with each of these proposals?

	Yes	No	Don't know
Remove the alternative fuel exemption			
Remove the historic and classic/niche exemption			
Remove the hardship exemption			

Do you believe that this proposal would cause any additional impacts that we should bear in mind? If you have thoughts about how we might mitigate these impacts please also set them out below.

Free text box

6, We believe that our age limit proposals would affect most drivers of Euro 3, 4 and 5 taxis. We have published an Integrated Impact Assessment, describing in detail the impacts our proposals could cause.

Please let us know if you have any comments on our Integrated Impact Assessment including any additional impacts or any other groups that may be affected by our proposals and any potential mitigating measures. Additionally, if you have any other comments about any of our other proposals, please record them below.

Free text box

About you

7, Are you responding as: (please tick all that apply)

- An All London taxi (black cab) driver
- A Suburban taxi (black cab) driver
- A taxi (black cab) owner
- A taxi (black cab) user
- A Taxicard member
- A private hire operator
- A private hire driver
- A private hire vehicle owner
- A private hire/minicab user
- A representative of an organisation
- A member of the public / not affiliated with the above

8, If you are responding as an All London or Suburban taxi (black cab) driver, what vehicle do you drive?

TX1
TX2
TX4
TXe
Mercedes Vito
Metrocab

Has your taxi been converted to LPG?

Yes
No
Rather not say

9, If you are responding as a taxi owner, how many taxis do you own?

Only 1 taxi
2-50
51-100
101-150
151-200
201-250
251-300
301-350
Over 350

10, If you are responding as a taxi (black cab) user, how often do you use taxis?

Daily
2-3 times a week
3-4 times a month
Once a month
Less often
Don't know

11, If responding on behalf of an organisation, business or campaign group, please provide us with the name of the organisation, business or campaign group. Please note: if you are responding on behalf of an organisation it must be in an official capacity

The Freedom of Information Act 2000 requires public authorities to disclose information they hold if it is requested. This includes information contained in responses to public consultations. Our intention is to publish the responses received but with any personal information removed. If you ask for your response to be kept confidential this will only be possible if it is consistent with our obligations under the Freedom of Information Act.

12, What is your post code?

13. What is your email address?

This is optional, but if you enter your email address then you will be able to return to edit your consultation response at any time until you submit it. You will also receive an acknowledgement email when you complete the consultation.

14, How did you find about this consultation?

Received an email from TfL
Received a letter from TfL
Read about it in the press
Saw it on TfL website
Social media
Other (please specify)

15, What do you think about the quality of this consultation (for example, the information we have provided, any printed material you have received, the website and questionnaire)?

Very good
Good
Acceptable
Poor
Very poor

Equalities monitoring

Please tell us about yourself in this section. All information will be kept confidential and used for analysis purposes only. We are asking these questions to ensure our consultations reach all sections of the community and to improve the effectiveness of the way we communicate with our customers. You do not have to provide any personal information if you don't want to.

Gender:
Please select only one item
Male
Female
Trans female
Trans male
Gender neutral
Prefer not to say

Ethnic Group:
Please select only one item
Asian or Asian British – Bangladeshi
Asian or Asian British – Chinese
Asian or Asian British – Indian
Asian or Asian British – Other
Asian or Asian British – Pakistani
Black or Black British – African
Black or Black British – Caribbean
Black or Black British – Other

Mixed – Other
Mixed – White and Asian
Mixed – White and Black African
Mixed – White and Caribbean
Other Ethnic Group
Other Ethnic Group – Arab
Other Ethnic Group – Kurdish
Other Ethnic Group – Latin American
Other Ethnic Group – Turkish
White – British
White – Irish
White – Other
Prefer not to say

Age:

Please select only one item

Under 15

16-20

21-25

26-30

31-35

36-40

41-45

46-50

51-55

56-60

61-65

66-70

71+

Prefer not to say

Sexual Orientation

Please select only one item

Heterosexual

Bisexual

Gay man

Lesbian

Other

Prefer not to say

Religious faith

Please select only one item

Buddhist

Christian

Hindu

Muslim

Sikh

Jewish

Other

No religion

Prefer not to say

Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months? (Please include problems related to old age)

Please select only one item

Yes, limited a lot

Yes, limited a little

No

Prefer not to say

Appendix C: Consultation material

Copy of consultation email sent to members of the public and stakeholders

Dear Sir or Madam

I am writing because we would like to know your views on proposed changes to maximum age limits for taxis.

We have today launched a consultation which contains several proposed changes to taxi age limits. Our proposals are designed to reduce harmful taxi NOx emissions and, in combination with our new taxi delicensing fund, to further encourage the take-up of new, zero-emission capable taxis. The proposals are:

- Mandating a maximum taxi operating age, to ensure that no taxi can be licensed to operate over its relevant maximum age limit
- Introducing a new phased age limit for taxis. We propose to reduce the maximum age limit by one year each year, to 12 years by 2022
- Removing taxi age limit exemptions, including the exemptions for alternative fuel conversions, historic and classic/niche vehicles and for hardship/personal circumstances

To view our proposals in more detail and have your say please visit: www.tfl.gov.uk/taxi-age-limit. The closing date for comments is **Friday 26 April 2019**.

If you have any questions regarding your licence or application, please email: tph.enquiries@tfl.gov.uk

Yours faithfully

Christina Calderato
Head of Delivery Planning
Transport for London

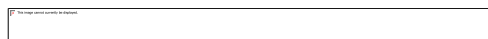
[Unsubscribe just this consultation](#)

If you no longer wish to receive emails in relation to this consultation, please let us know by replying to this email. Please add 'UNSUBSCRIBE' to the title of your email. Further information on how we use your data is available on the **consultation portal**

Unsubscribe All

If you no longer wish to receive emails from us, including any relating to consultations you have responded to previously, or details of any new consultations, please let us know by replying to this email. Please add 'UNSUBSCRIBE ALL' to the title of your email. Further information on how we use your data is available on the **consultation portal**

Copy of the press release on 15 February 2019



news release

Office hours: 020 7983 4070

Out of hours and weekends: 020 7983 4000

www.london.gov.uk

[@LDN PressOffice](#)

Friday 15th February 2019

£24m funding boost to accelerate the greening of London's black cabs

- **1,000 extra grants of £10,000 made available to help more drivers make the move to cleaner vehicles, with more than 2,000 additional payments available overall**
- **Public consultation launched on reducing the age limit of the most polluting taxis**

The Mayor of London, Sadiq Khan, has today announced plans to invest an extra £24m to help more black cab drivers switch to electric vehicles - more than doubling TfL's existing £18m fund which launched last month.

Under the plans, grants will be restructured to provide more payments at higher levels – with 1,000 more drivers set to benefit from the maximum £10,000 payment from trading in their older, dirtier vehicles earlier.

The additional funding, included in the Mayor's draft budget for 2019/20, is expected to help around 2,000 additional drivers go green, with more than 5,000 drivers now set to benefit from the fund overall. The enhanced scheme – on its own – could reduce NOx taxi emissions by as much as 20 per cent.

There has been high demand for the TfL enhanced delicensing fund which has tiered payment levels on a first come, first served basis.

The funding boost comes as TfL launches a 10-week public consultation on changes which would significantly reduce harmful emissions from taxis. Londoners are being asked for their views on changing the age limits of black cabs to speed up the process of the dirtiest vehicles being replaced with zero-emission-capable cabs.

London is facing an air quality crisis with filthy fumes reducing the length and quality of life in the capital. Black cabs are exempt from the Ultra Low Emission Zone, but they cause 20 per cent of road transport emissions in central London, and this is expected to grow further this year unless action is taken. TfL's proposals aim to address this by reducing taxi-based NOx emissions by 65 per cent by 2025.

They include:

- A tightening of the rules so that taxis cannot be licensed beyond their 15th anniversary, rather than being able to operate for up to a full 16th year
- A phased reduction in the age limit for the most polluting taxis to 12 years by 2022 by decreasing the current 15-year limit each year, by a year, from 2020
- Removing the automatic age limit exemptions for alternative fuel conversions, historic vehicles or personal circumstances

The Mayor of London, Sadiq Khan, said:

“Working with cabbies to reduce the number of polluting taxis is a key part of our plans to improve London's air quality.

“I've been delighted by the number of cabbies who have applied for our grants so far – doing their bit to improve our dirty air. The additional £24m announced today will more than double the size of the scheme, making it easier for more drivers across the city to go green.”

Steve McNamara, General Secretary of the Licensed Taxi Drivers' Association, said:

"I'm pleased the Mayor has recognised the need to support the taxi trade in its efforts to reduce emissions and accelerate the growth of the zero emission capable taxi fleet. Providing an additional £24m funding for the newly enhanced delicensing scheme is the right thing to do and I welcome the Mayor's intervention. This will provide a leg-up to those who want to adopt this exciting new technology. Anything we can do to improve air quality in London will benefit everyone, including taxi drivers who will suffer the ill effects of air pollution as much as anyone else."

From 1 January last year, all black cabs licensed for the first time have had to be zero emission capable (ZEC). There are now more than 1,000 of the new environmentally friendly vehicles serving London, with more than 150 rapid charging points giving cabbies a wide range of locations to power up quickly. 64 of the rapid charging points are specifically reserved for black cabs. By 2020 there will be at least 300 points to meet the growing demand for electric vehicles.

As Euro 5 taxis, which emit high levels of NOx emissions, would not be affected by the age limit proposals in the short term, £5 million is also being set aside to support their conversion to liquid petroleum gas (LPG). Independent testing shows that an average TX4 taxi emits over 70 per cent less NOx after being converted to run on LPG. Trials also show that drivers of LPG-converted taxis can save around £200 a month in fuel costs. The maximum age limit for Euro 6 and ZEC taxis and those Euro 5s newly converted to LPG would remain at 15 years in recognition of the fact that they meet ULEZ standards.

The private hire industry is also playing its part, with all vehicles licensed for the first time from the start of last year having to meet LEZ standards. From the start of 2020 there will be a further step change, with newly licensed minicabs being required to be ZEC. From 8 April, private hire vehicles will also need to meet the ULEZ standards and pay the Congestion Charge when driving in central London.

Alex Williams, TfL's Director of City Planning, said: "Taxi drivers are part of London's lifeblood and more than 1,000 are already making a major contribution to cleaning up the air for future generations by using electric black cabs. This package of measures will incentivise more drivers to buy the new clean taxis and speed up the rate the vehicles that emit the most harmful pollutants are being taken off the road."

“Making transport across London more sustainable is vital if the capital is to meet legal limits for clear air. The Ultra Low Emission Zone (ULEZ) will be introduced this April, with some of the toughest standards in the world. There is also a London-wide effort to clean up the bus fleet, including the phasing out of diesel-only buses and a commitment to purchase only hybrid or zero-emission double-decker buses from this year. We are proud that the city has one of Europe’s largest zero-emission fleets but our ultimate aim is for all buses to be converted by 2037.”

Dr Penny Woods, Chief Executive of the British Lung Foundation, said: “This is a welcome move from TfL and we would like to see other cities follow suit. Air pollution is a threat to all of our health, and our lungs act as an early warning sign of the damage it’s doing throughout our bodies.

“You’re exposed to more dirty air inside a car, so this initiative will go towards protecting cabbies’, their customers and all Londoners. The Mayor’s Healthy Streets Approach goes beyond tackling road transport and looks at helping more people to walk, cycle and use public transport, so we look forward to seeing even more action to clean up the toxic in the capital.”

John Maingay, Director of Policy & Public Affairs at the British Heart Foundation, said: “Breathing dirty air contributes to thousands of deaths in the UK each year. Our research has shown that the tiny particles produced by diesel vehicles may silently damage our heart and circulatory systems, significantly increasing the risk of a devastating heart attack or stroke.

“We need to see an urgent and sustained shift away from diesel vehicles if we are to protect the nation’s health from our toxic air.”

“Making black cabs greener in the nation’s capital is a welcome step in the right direction. But it must be accompanied by bold, wide-ranging action from the government to ensure air pollution is being tackled at the same pace across the country. We need to see this action as soon as possible, beginning with the adoption of World Health Organisation air pollution limits into UK law.”

Stephen Edwards, Director of Policy and Communications at Living Streets, said:

“Dirty air is currently contributing to 36,000 premature deaths a year in the UK and is having a particularly negative impact on children.

“Black cabs are iconic in London but also make a major contribution to poor air quality in the capital. We support this important measure to reduce the number of polluting vehicles on London’s roads.”

Copy of Metro article

Making black taxis greener

HAVE YOUR SAY ON REDUCING THE MAXIMUM AGE LIMITS FOR LONDON TAXIS

LONDONERS are being asked for their views on changing the age limits of black cabs to help improve the quality of the capital's air.

It is estimated that in 2018 taxis contributed a quarter of the total nitrogen oxide (NOx) emissions in central London.

This year, taxis will be the largest source of NOx emissions from transport in central London. TfL has now launched

a consultation asking for views on how to reduce these harmful emissions from taxis. Proposals include:

MANDATING THE MAXIMUM TAXI OPERATING AGE

Currently, taxis can be licensed for 12 months up until the day before the taxi reaches its maximum operating age of 15 years. This means that taxis can operate beyond the maximum age limit.

TfL plans to make the maximum operating age the same as the relevant age limit for all licensed taxis in 2019.

INTRODUCING A NEW AGE LIMIT FOR TAXIS

TfL proposes that the maximum taxi age limit be reduced to 12 years by 2022 for Euro 3, 4 and 5 taxis. The age limit will be reduced in phases, to give taxi owners and operators enough time to comply. It also plans to reduce the maximum age



Cleaner cabs: TfL is proposing to remove the capital's most polluting taxis

limit by one year, each year, until 2022. It is proposed that the maximum age limit for the cleanest

Euro 6 and zero emission capable taxis, as well as those converted to liquid petroleum gas under a new

scheme, would remain at 15 years.

Stephen Edwards, director of policy and communications at Living Streets, said: 'Black cabs are iconic in London but also make a major contribution to poor air quality in the capital. We support this important measure to reduce the number of polluting vehicles on London's roads.'

The consultation closes on April 26, 2019.

Get in touch

For more information and to have your say, go to tfl.gov.uk/taxi-age-limit

You can also write to Freepost TfL Consultations or email consultations@tfl.gov.uk

Extract of weekly email sent to all taxi and PH drivers that we hold email addresses for.

Consultations

Taxi age limit and exemptions consultation

We're consulting on changes to the taxi age limits and exemptions. You can read about the proposals on our website and have until Friday 26 April to [share your views](#).

If you want to email us documents or have questions about renewals, medicals, English language requirements or other licensing-related issues, please do not send these to the TfL Consultations email address. These should be sent to tph.enquiries@tfl.gov.uk

A copy of the tweets that were sent out using the TfL TPH twitter feed.

 **TfL Taxi & Private Hire** 
@TfLTPH Follow 

◆ Consultation Alert ◆ the taxi age limits and exemptions consultation closes tomorrow on Friday 26 April 2019. Please ensure that you have responded 
consultations.tfl.gov.uk/tph/taxi-age-l...

1:00 AM - 25 Apr 2019

33 Retweets 3 Likes 

 18  33  3

 **TfL Taxi & Private Hire** 
@TfLTPH Follow 

◆ Consultation Alert ◆ the taxi age limits and exemptions consultation closes this week on Friday 26 April 2019. Please ensure that you have responded 
consultations.tfl.gov.uk/tph/taxi-age-l...

1:00 AM - 23 Apr 2019

19 Retweets 4 Likes 

 3  19  4



TfL Taxi & Private Hire

@TfLTPH

Follow

◆ Consultation Alert ◆ the taxi age limits and exemptions consultation is open until Friday 26 April 
consultations.tfl.gov.uk/tph/taxi-age-l...

5:00 AM - 16 Apr 2019

3 Retweets



Retweet 3



Prior to the consultation launch there was a press release on the 19 December 2018 advising of the upcoming consultation, a copy of this release can be found by following the link

<https://tfl.gov.uk/info-for/media/press-releases/2018/december/mayor-and-tfl-launch-bold-plans-to-tackle-london-s-lethal-air>

Appendix D: stakeholders list that we consulted.

We consulted all London boroughs and all Members of Parliament with constituencies in London. We also contact all GLA members.

- | | | |
|--|-------------------------------------|------------------------|
| 20 is plenty for us | AA | Access in London |
| Action Disability Kensington & Chelsea | | Action on Disability |
| Action on Disability and Work UK | | Action on Hearing Loss |
| Action on Hearing Loss (formerly RNID) | | Age Concern London |
| Age UK | Age UK Lewisham and Southwark | |
| Age UK London | Age UK Waltham Forest | |
| Alive in Space Landscape and Urban Design Studio | | |
| All Party Parliamentary Cycling Group | | Alliance Healthcare |
| Alzheimer's Society | Alzheimer's Society Waltham Forest | |
| Angel | Ann Frye | Anxiety Alliance |
| Anxiety UK | Asian Peoples Disabilities Alliance | |

Aspire Association of British Drivers
 Association of Car Fleet Operators
 Association of Directors of Public Health for London
 Autogas Ltd BAA Heathrow Baker Street Quarter
 Bankside Residents' Forum BAPS Swaminarayan Sanstha
 Barking & Dagenham Safer Transport Team
 Barking and Dagenham NHS Care Commissioning Group
 Barking, Havering and Redbridge University Hospitals NHS Trust
 Barnes Community Association Barnes Hospital Barnet Community Transport
 Barts Health Trust
 Basildon and Brentwood NHS Care Commissioning Group
 Battersea Society BBC Bee Midtown
 Belgravia Residents Association
 Belmont & South Cheam Residents' Association
 Belsize Park Residents' Association Belvedere Community Forum
 Best Bike Training //Cycletastic Better Bankside BID
 Better Transport Bexley Community Transport Scheme (BATS)
 Bexley NHS Care Commissioning Group Bexleyheath BID
 bhs bikeability bikeXcite
 Blackheath Joint Working Party Bloomsbury Air
 Borough Cycling Officers Group Brains Trust Breakspears Road Project
 Brent Community Transport Brent Safer Transport Team
 Brentford Community Council Brentwood Community Transport,
 British Airways British Cycling British Dyslexia Association
 British Land British Medical Association
 British Motorcycle Federation Brixton
 Bromley & District Consumer Group Bromley BID
 Bromley Cyclists Bromley Safer Transport Team
 Broxbourne Borough Council Buckinghamshire County Council
 Bucks Cycle Training Bus Watch West Haringey
 Cabvision Capital Limited
 Camden Civic Society's Air Quality, Green Open Spaes and Trees group (AQGOST)
 Camden Cyclists Camden Safer Transport Team
 Camden Town unlimited Campaign for Better Transport
 Campbell's Canal & River Trust
 Canal & River Trust London Canary Wharf Management Ltd
 Capital City School Sport Partnership Carers First
 Carers Information Service Caroline Pidgeon MBE AM
 Cassel Hospital CBI
 CCG Central London (WESTMINSTER) CCG City and Hackney
 CCG Enfield CCG Greenwich CCG Havering
 CCG Hounslow CCG Islington CCG Kingston
 CCG Wandsworth Central Ealing Neighbourhood Forum
 Central London CTC Central London Forward

Central London NHS Trust Charlton Rail user Group
 Chartered Institute of Logistics and Transport (CILT)
 Chauffeur and Executive Association Cheapside BID
 Chelsea Society Chessington District Residents Association
 Chiltern District Council Citizens UK City Bikes (Vauxhall Walk)
 City of London Access Group City of London Corporation
 City of London Police City of Salford Private Hire Association
 Clapham Society Clapham Transport Users Group
 Clean Air in London (CAL) Clean Air Brent
 Community Transport Waltham Forest
 Community Waltham Forest Computer Cab
 Confederation of Passanger transport Connect
 Coulsdon & Purley Road Users Forum Coulsdon College
 Coumminity Transport Group Hounslow Cross River Partnership
 Croydon Accessible Transport (CAT) Croydon BID
 Croydon College Croydon Safer Transport Team
 Croydon Transport Focus CTC CVU
 Cycle Confidence Cycle Experience Cycle Newham
 Cycle Systems Cycle Training UK (CTUK)
 Cyclelyn Cycle-wise Thames Valley
 Cycling Embassy of Great Britain cycling4all Cyclists in the City
 DABD (UK) Dbrief Monthly Department for Transport
 Design for London Dial-a-Cab Direct Line Group
 Disability Alliance Disability Network Hounslow
 Disability Rights UK Disabled Go
 Disabled Persons Transport Advisory Committee
 Disablement Association Barking and Dagenham (DABD)
 Dogs for Good DPTAC
 Driver & Vehicle Licensing Agency (DVLA) Ealing Broadway BID
 Ealing Civic Society Ealing Community Transport (ECT Charity)
 Ealing Passenger Transport Users' Group Ealing Safer Transport Team
 East and South East London Thames Gateway Transport Partnership
 East Finchley Bus Watch East London Vision
 East Surrey Transport Group Edmonton CLP Ehlers Danlos Support UK
 Elmbridge Borough council Enfield Community Transport (ECT)
 Enfield Cycle Campaign Enfield Safer Transport Team
 Enfield,Grovelands Residents' Association English Heritage
 English Heritage – London Epsom & Ewell Borough Council
 Essex County Council ETOA – European tourism association
 European Dismelia Reference Information Centre Evolution Cycle Training
 Evolution Quarter Residents' Association Farringdon and Clerkenwell
 Fitzrovia Neighbourhood Association
 Forest Hill Traders Association Friends of Capital Transport
 Friends of the Earth Future Inclusion

Gastech LPG London Taxi Technology	Gatwick Airport
GBM Drivers	GLA Strategy Access Panel members
GMB Union	Greater London Forum for Older People
Greater London Forum for the Elderly	Greenwich Cycling Group
Greenwich Safer Transport Team	Greenwich Society
Guide Dogs for the Blind Association	
Hackney Community Transport HCT	
Hackney Safer Transport Team	
Hammersmith & Fulham Safer Transport Team	Hampstead BID
Haringey Living Streets	Haringey Safer Transport Team
Harrow Association for Disabled People (HAD)	Harrow Community Transport
Harrow Macular Disease Society	Harrow Passenger Transport Users Association
Harrow Safer Transport Team	Harrow Town Centre
Harrowby and District Residents Association	Hatton Gardens
Havering Community Transport Limited	
Havering Safer Transport Team	Health Poverty Action
Hearing Dogs UK	Heart of London Business Alliance
Heatham Alliance community network	Heathrow
Heathrow Airport Consultative Committee	Herne Hill Society
Hertfordshire County Council	Hertsmere Borough Council
Higham Residents Association	Highgate Society
Hillingdon Safer Transport Team	
Homerton University Hospital NHS Foundation Trust	
Hounslow Safer Transport Team	ICE –London
In & Around Covent Garden	In Holborn
Inclusion London	IDAG
Institute for Sustainability	In Streattham
Institution of Civil Engineers	Independent Disability Advisory Group
Islington Safer Transport Team	Institute of Advanced Motorists
James Bikeability	IOD
Joint Committee on Mobility for Disabled People (JCMD)	Islington Transport Aware
Joint Committee on Mobility of Blind and Partially Sighted People (JCMBPS)	JFS
Joint Mobility Unit	John Ruskin College
Kent County Council	Kensington & Chelsea Safer Transport Team
Kingston First	Kingston and Sutton Shared Environment Service
Kingston Town Centre Management Limited	Kingston Safer Transport Team
Lambeth Cyclists	KIPPA
LB of Bromley Residents Association	Lambeth Safer Transport Team
Learning Disabled service User	Leonard Cheshire Disability
Lewisham Clinical Commissioning Group	
Lewisham community Transport group	
Lewisham Safer Transport Team	Lewisham Shopping Centre
Licensed Private Hire Car Association	
Licensed Taxi Drivers Association	Living Streets

Living Streets – Brentwood Living Streets - Hackney
 Living Streets – Islington Living Streets - Kings Cross (Camden)
 Living Streets – Lewisham Living Streets - Merton
 Living Streets – Newham Living Streets - Sutton
 Living Streets - Tower Hamlets Living Streets Action Group
 Living Streets London Living Streets Southwark
 London Ambulance Service London Bike Hub London Bridge Team
 London Cab Drivers Club
 London Chamber of Commerce and Industry (LCCI) London City Airport
 London Councils London Cycling Campaign
 London Cycling Campaign (Brent)
 London Cycling Campaign (Camden)
 London Cycling Campaign (Croydon)
 London Cycling Campaign (Croydon)
 London Cycling Campaign (Ealing)
 London Cycling Campaign (Enfield)
 London Cycling Campaign (Enfield)
 London Cycling Campaign (Hackney)
 London Cycling Campaign (Hammersmith and Fulham)
 London Cycling Campaign (Haringey)
 London Cycling Campaign (Hillingdon)
 London Cycling Campaign (Islington)
 London Cycling Campaign (Kensington and Chelsea)
 London Cycling Campaign (Kingston)
 London Cycling Campaign (Lambeth)
 London Cycling Campaign (Lewisham)
 London Cycling Campaign (Merton)
 London Cycling Campaign (Newham)
 London Cycling Campaign (Redbridge)
 London Cycling Campaign (Richmond)
 London Cycling Campaign (Southwark)
 London Cycling Campaign (Tower Hamlets)
 London Cycling Campaign (Waltham Forest)
 London Cycling Campaign (Wandsworth)
 London Cycling Campaign (Wandsworth)
 London Cycling Campaign (Westminster)
 London Cycling Campaign Greenwich
 London European Partnership for Transport
 London Fire and Emergency Planning Authority London Fire Brigade
 London Gypsies & Travellers London Older People's Strategy Group
 London Omnibus Traction Society
 London Private Hire Board London Region National Pensioners Convention
 London Riverside London Strategic Health Authority
 London Suburban Taxi Coalition London Suburban Taxi-drivers' Coalition

London TravelWatch
 London Wetland Centre (South)
 London Wildlife Trust
 Look Ahead
 Lupus UK
 Marble Arch
 MASC (Make Air Safe & Clean)
 Mencap
 Merton Community Transport (MCT) Mitcham
 Metropolitan Police Heathrow Airport
 Metropolitan Police - Community Police
 Metropolitan Police Service
 Metropolitan Police Service - NW
 MI6
 Mode Transport
 Mytaxi
 National Motorcycle Council
 Netley Primary School
 Newham Safer Transport Team
 NHS CCG Bromley
 NHS Ealing Care Commissioning Group (CCG)
 NHS Newham CCG
 North West London Hospitals NHS Trust
 Norwood Green Residents' Association
 NW3 Green School Runs
 On Your Bike Cycle Training
 Orpington District Transport Users Association
 Osterley and Wkye Green Residents's Association (OWGRA)
 Paddington Residents Active Concern On Transport (PRACT)
 Pan-London Dementia Alliance
 Parkinson's UK Waltham Forest
 Parliamentary Advisory Council for Transport Safety (PACTS)
 Petts Wood & District RA
 Planning Design
 Powerscroft Road Initiative for Neighbourhood Community & Environment
 Prevention Team (Healthy London Partnership)
 Public Health England
 Purley BID
 Putney Traffic Transport and Parking Working Group
 Queen Mary University of London
 Raynes Park & West Barnes Residents' Association
 Reading Borough Council
 Redbridge Safer Transport Team
 Reigate and Banstead Council
 London Visual Impairment Forum
 London Wetland Centre, Richmond
 London's Taxi Drivers Association
 Love Wimbledon BID
 Manor Grove Residents Association. Richmond
 Marylebone Association
 Medway Estate Residents' Forum
 Merton and Sutton Safer Transport Team
 Metropolitan Police
 TMU Islington, Barnet, Haringay, Camden
 MIND
 Motorcycle Action Group
 National Autistic Society
 Neighbourcare St John's Wood & Maida Vale
 New West End Company
 NHS Ambulance Services - West London
 NHS CCG Camden
 NHS London
 NHS Tower Hamlets CCG
 No Panic
 Northbank BID
 Nutmeg
 Ocean Youth Connexions
 Organisation of Blind Afro Caribbeans (OBAC)
 Pimlico FREDa
 Port of London Authority
 Private Hire Board
 Public Health Team in WCC, LBHF and RBKC
 Putney BID
 Putney Society
 Puzzle Focus Ltd
 RAC Motoring Foundation
 Rail Delivery Group
 Redbridge Cycling Centre
 Regulatory Services Partnership
 Residents Society of Mayfair and St James's

Richmond and Kingston Accessible Transport		Richmond BID
Richmond Royal Hospital	Richmond Safer Transport Team	
RMT London Taxi	RMT Union	RNIB
Road Danger Reduction Forum	Roadpeace	
Royal Institute of British Architects		
Royal Institute of Chartered Surveyors		
Royal London Society for Blind People		Royal Parks
Royal Society of Blind Children	Royal Town Planning Institute (RTPI)	
Runnymede Borough Council	Scope	SeLVIS
Sense	Sight Centre in Bromley	Sixty Plus
Slough Borough Council	Soho Society	
South Bermondsey Partnership	South Bucks Cycle Training	
South East Bayswater Residents Association		
South East London Vision	South Greenwich Forum	
South Herts Plus Cycle Training		
South Leytonstone Area Development Association (SLADA)		
South Mobility Forum Croydon	South Mobility Forum Merton	
South Mobility Forum Richmond	South Mobility Forum Wandsworth	
South West Rail	Southbank BID	Southwark Cyclists
Southwark Safer Transport Team	Southwark Travellers' Action Group	
Space syntax	Spelthorne Borough Council	
Spokes Cycling Instruction	St Germans Terrace Association	
St Helen's Residents' Association	St John's Wood Society	Station to Station
Stay Safe	Strategic Access Panel	Stratford Original
Strawberry Hill Neighbourhood Association		Streatham BID
Streatham Vale Property Occupiers Association		Stroke Association
Stroud Green Residents Association		Surrey County Council
Sustrans	Sutton Centre for Voluntary Sector	
Sutton Community Transport	Sutton Rail Users' Forum	Sutton Seniors Forum
Tandridge District Council	Team London Bridge	
Technicolour Tyre Company	Teddington Memorial Hospital	
Thamesmead Business Services	The Advocacy Project	
The Association of Guide Dogs for the Blind		The Blackheath Society
The British Dyslexia Association	The British Motorcyclists' Federation	
The Canal & River Trust	The Clapham Society	The Clubhouse
The Driver-Guides Association	The Fitzrovia Partnership	
The International Council on Clean Transportation		
The Knightsbridge Residents Management Company Limited		
The Langton Way Residents Association		
The London Legacy Development Corporation		
The London Motor Cab Proprietors Association (LMCPA)		
The Royal Geographical Society	The St Marylebone Society	
The Westcombe Society	This is Clapham	
Thomas Pocklington Trust	Thorney Island Society	

Three Rivers District Council Thurrock Borough Council Tour Guides
 Tower Hamlets Community Transport
 Tower Hamlets Safer Transport Team
 TPH for Heathrow Airport Traffic Commissioners for Great Britain
 Trailblazers, Muscular Dystrophy UK Transport Focus
 Transport for All Try Twickenham
 Twickenham Park Residents' Association (TPRA)
 Tyssen Community School Cycle Training Uber
 UK100 Unions Together Unite the Union
 Unite the union London Central Cab Section United Cabbies Group
 University College Hospital University College London UPHD
 Urban Movement Valuing People (TfL's learning disability group)
 Vandome Cycles
 Vauxhall Gardens Estate Tenants & Residents Association Vauxhaull One
 Victoria Business Improvement District Virtual Norwood Forum
 Vision 2020 Visit Chislehurst Walk London
 Waltham Forest Dementia Action Alliance
 Waltham Forest Safer Transport Team Waltham Forest Vision
 Walthamstow Village Residents Association
 Wandsworth Community Transport
 Wandsworth Cycling Campaign Wandsworth Safer Transport Team
 Waterloo Quarter Watford Council
 West Chiswick and Gunnersbury Society
 West Hampstead Amenity & Transport West London Alliance
 West Twyford Residents' Association Westminster Cyclists
 Westminster Safer Transport Team
 Westway Community Transport Wheels for Wellbeing Whizz-Kidz
 Willow Lane BID www.cyclinginstructor.com
 Yiewsley & West Drayton Town Centre Action Group

Appendix D - Integrated Impact Assessment and Supporting Information

Consultation Proposals for reducing emissions from London's taxis: Information and Integrated Impact Assessment

FEBRUARY 2019

1. Introduction

This document sets out further information on Transport for London's consultation proposals that aim to help to deliver the necessary reduction in taxi emissions in London. In order to achieve air quality compliance by 2025, we need to reduce taxi emissions by 65 per cent (on 2013 levels).

It also contains an appraisal of the proposals in the form of an Integrated Impact Assessment (IIA). An IIA enables decision makers to consider both positive and negative potential impacts that proposed changes may have. The primary aim of the IIA is to identify the likely significant impacts and secondly, where possible, to suggest amendments to the proposals or mitigations to minimise any negative impacts of the proposals or enhance positive impact, should they be implemented.

The structure of this document is set out below:

Chapter 2 provides background on London taxis

Chapter 3 highlights the impact of taxis on air quality

Chapter 4 discusses the proposals

Chapter 5 outlines the methodology of the IIA

Chapter 6 provides the baseline

Chapter 7 covers the impacts of the proposals

Chapter 8 discusses potential mitigations or enhancements

2. London Taxis

There are currently 20,485¹ taxis licensed by TfL to operate on London's roads. Traditionally known as hackney carriages or 'black cabs'; they predominately operate across London, including at Heathrow airport and often have journeys with the destination outside London (e.g. Gatwick airport).

Taxis are regulated by TfL and can be hailed on the street or from a taxi rank, as well as being pre-booked. The fares, which are also regulated and set by TfL, are calculated using a taxi meter. The licensing criteria ensure that all taxis and taxi drivers meet specific requirements, enabling them to provide a consistent, safe and accessible service. Features of taxi services include:

- all taxis have a 'for hire' light on the roof of the vehicle;
- passengers can pay by debit, credit or contactless in all taxis;
- all taxis are wheelchair accessible and include a range of other accessibility features;
- all taxis carry assistance dogs free of charge; and
- all drivers have passed the Knowledge of London.

The Knowledge of London ensures drivers know the quickest and most direct route for their journey. All drivers are required to wear a badge to demonstrate they are licensed: all London drivers who have a green badge are licensed to pick up passengers anywhere in London while suburban drivers, who have a yellow badge, are licensed for sectors in outer London areas. Yellow badge drivers can only accept jobs when they are in their licence area but can drop off passengers anywhere. Figure 1 below shows the nine suburban driver sectors, each made up of between one and four London Boroughs.

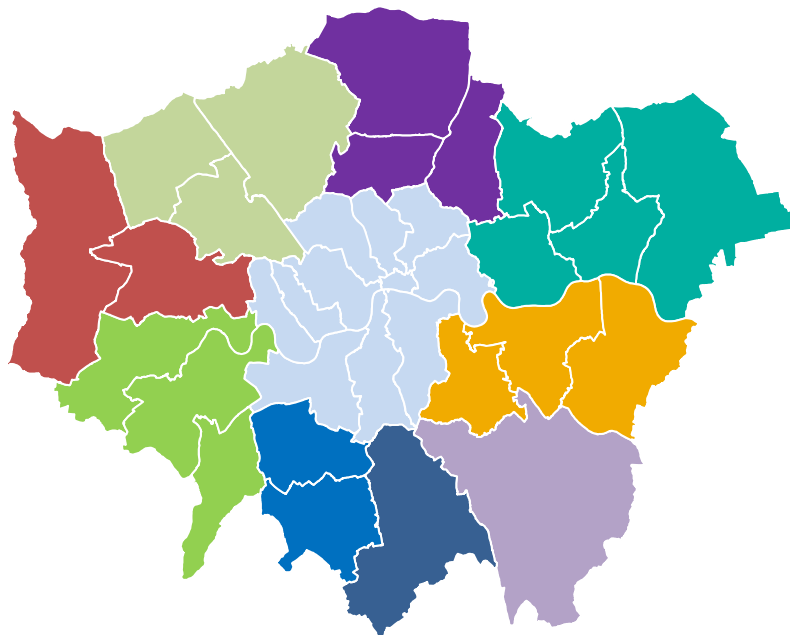


Figure 1: Map to show different yellow badge sectors

¹ Figures from TfL 20 January 2019

London's taxis provide a reliable and trusted service to Londoners, tourists and business people from home and abroad, offering customers safety and convenience, aided by drivers' extensive knowledge of the capital's streets. The measures set out above mean taxis are accessible to the full range of the population and so offer a key part of the transport options available to people who live in, work in or visit London.

3. Impact of Taxis on Air Quality

3.1 Air Quality in London

Air pollution is a key contributory factor to the health of Londoners. Traffic-related emissions are the primary cause of high levels of these pollutants in London. Traffic-related pollutants with direct links to health effects are Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀ and PM_{2.5}). Exposure to elevated concentrations of NO₂ has been linked with a range of respiratory symptoms, including decreases in immune defence leading to increased susceptibility to respiratory infection.

The European Union has recognised the impact of air pollution from vehicles on health, the impact on individuals and families and also the subsequent pressure on health care services across member states. Action to manage and improve air quality is largely driven by European (EU) legislation.

For example, the 2008 Ambient Air Quality Directive² (AQD) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as NO₂, PM₁₀ and PM_{2.5}. The AQD was made law in England through the Air Quality Standards Regulations 2010³. This legislation set legal limits (called 'limit values') for concentrations of pollutants in outdoor air. These Government regulations and legal limits will remain in force regardless of the UK leaving the EU, unless specifically repealed.

In order to conform with the AQD National Air Quality Objectives have been established including the government's 'Air quality plan for nitrogen dioxide (NO₂) in UK (2017)'. Local authorities are responsible for making sure that the National Air Quality Objectives are met in their areas. These objectives correspond with the limits and target values from the AQD and are how we measure whether or not we are breaking EU law. These objectives and targets have been put in place to protect people's health.

If a local authority finds any locations where objectives are not likely to be achieved, then it must declare an Air Quality Management Area (AQMA) there. In London, all 33 boroughs (including the City of London) have declared an AQMA relating to road emissions, and for the majority of boroughs this covers the whole borough area. Nearly all AQMAs declared by London boroughs relate to both the NO₂ annual mean and the PM₁₀ 24-hour mean objectives, although a few AQMAs also include the NO₂ 1-hour mean or the PM₁₀ annual mean objectives. The limit breaches for NO₂, PM₁₀ and PM_{2.5}, mean that the reduction of harmful emissions from motor vehicles is a key priority at both the national and local level.

In London, diesel emissions play a significant role in these pollution levels with NO_x (**oxides of nitrogen**) emissions from diesel cars in London on average six times higher than those of petrol cars⁴. In many areas of London the communities suffering most from poor air quality are the most vulnerable in society.

Research by the International Council on Clean Transportation⁵ has shown that 'real-world emissions'⁶ from London taxis can be seven times higher than their Euro standard

² <https://eur-lex.europa.eu/LexUriSrv/LexUriSrv.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>

³ <http://www.legislation.gov.uk/uksi/2010/1001/contents/made>

⁴ <https://www.trueinitiative.org/data/publications/remote-sensing-of-motor-vehicle-emissions-in-london>

⁵ <https://www.theicct.org/sites/default/files/TRUE%20London%20Taxi%20Fact%20Sheet%2020181218.pdf>

⁶ Emissions resulting from everyday driving in and around a city making multiple stops, starts and waiting in traffic

certification limits, exceeding the levels measured by diesel passenger cars. The research also suggests that NOx emissions from Euro 5 taxis are higher than those certified to previous Euro standard 3 and 4 vehicles, and are approximately three times those of Euro 5 standard diesel cars.

As of January 2019 well over 90 per cent of taxis were diesel (over 19,000 vehicles). TfL estimates that taxis currently contribute 25 per cent of road transport NOx in central London (this is higher than previously thought)⁷. If the current trajectory continues then taxis are expected to be the biggest source by 2020 and this will increase further if we do not improve the rate at which the taxi fleet is cleaned up⁸. If we are to meet the UK's legal commitments then we must reduce NOx emissions from taxis in central London by 65 per cent by 2025 (compared to 2013 levels), amongst other requirements. This target is set by the government's Air quality plan for nitrogen dioxide (NO₂) in UK (2017)⁹, which states that no new diesel taxis will be licensed from 1 January 2018, with an expectation of 9,000 zero emission capable (ZEC) taxis by 2020.

Diesel Engine Euro Classification	NOx emission rate (g/km)
Euro 2	1.80
Euro 3	1.26
Euro 4	1.02
Euro 5	1.38
Euro 6	1.11
LPG	0.36
ZEC	0.03

Table 1: Range of NOx emissions per km from different Euro class diesel engines

3.2 Policies to reduce emissions from taxis

2015 proposals for reduction of age limit, change in licencing regulations to ZEC only, and setting of ZEC uptake target

In 2015, TfL consulted on reducing the taxi age limit to 10 years, 12 years or remaining at 15 years with a range of incentives to drive uptake of ZEC taxis. Following the consultation, it was decided to retain the 15-year age limit. Instead, the target of 9000 ZEC taxis to be in service by the end of 2020 was set, which was approximated to amount to a 45 per cent reduction in taxi NOx emissions from 2013 levels¹⁰. However, it was stated in the Ultra Low Emission Zone Further Licensing Proposals for Taxi and Private Hire Vehicles Consultation Report (2015) that the policy would be revisited if the targets set to enable the necessary changes to the fleet were not on track to be achieved by 2020.

⁷ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data

⁸ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

⁹ <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

¹⁰ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

A number of changes were made in order to drive the uptake of ZECs including amending licensing regulations so that from January 2018 all newly licenced vehicles had to be ZEC, introducing a delicensing scheme and providing grants towards the purchase of ZECs (details in sections below).

Liquid Petroleum Gas (LPG) Age Limit Extension

LPG produces lower emissions than diesel taxis. Taxis converted to run on LPG have received an additional five year extension to the vehicle’s maximum age limit, allowing taxis to operate until they were 20 years old. This recognised that the cost of the LPG conversion was at the taxi owner/ operator’s expense.

Original (2015) Delicensing Scheme and Plug in Car Grant

In 2015, TfL consulted on complimentary measures for taxis. Alongside the change in licensing regulation to stipulate ZEC only from January 2018, grants were made available to support owners/ operators with purchasing ZEC taxis. These grants were available from three sources:

- i) Government funding from the Office for Low Emission Vehicles (OLEV) which provided a grant for the purchase of eligible vehicles, known as the plug-in car grant or PICG. The PICG was set at a maximum of £5,000
- ii) TfL offered a top-up grant in addition to the OLEV scheme for ZEC taxis. This was funded by £25 million from central Government. Each purchaser of a ZEC taxi was entitled to a maximum of £3,000
- iii) TfL also made available delicensing payments to eligible taxi owners from its own funds. The payments went to taxi owners who delicensed a taxi before it reached the 15-year age limit. This operated on a sliding scale reflecting the number of ‘plates’ (years) remaining. Table 2 provides a summary of the range of payments available.

Number of plates remaining	Payment amount
5	£5,000
4	£3,800
3	£2,800
2	£1,900
1	£1,200

Table 2: Range of payments available from previous (2015-2018) TfL delicensing fund

The full range of grants available is summarised in table 3.

From	What for	How much
OLEV	Purchase of a ZEC	£5,000 (max)
TfL (via C.Gov't)	Purchase a ZEC 'top up'	£3,500 (max)
TfL	Delicensing taxi	£5,000 (max)

Table 3: Range of grants available

The ZEC purchase 'top-up' grant and the decommissioning scheme were separate schemes and there was never an obligation for the recipient of a decommissioning payment to buy a ZEC taxi with the money provided. The voluntary delicensing scheme was undersubscribed and at the point of closure on 14 January 2019, only £485,000 had been paid out.

This original scheme was unpopular with taxi drivers and owners because the amounts available were considered too small to incentivise drivers to delicense. It was felt that this did not make a big enough difference to the purchase price of a new ZEC taxi, which was approximately £55,000 at the end of 2018. Payments were significantly lower than the income that could be generated from renting out the taxi until it reached 15 years. There were also reports of resale values outside of London falling and this affecting uptake of the decommissioning grants.

In July 2017 changes to the grants available to help purchase a ZEC taxi were announced. The Government's Plug-in Taxi Grant, part-funded by the Mayor, would give up to £7,500 towards the purchase of a new ZEC taxi vehicle. This replaced the previous OLEV and TfL 'top up grant' (£5 and £3k respectively). At this time the grant of up to £5k from TfL for delicensing a taxi that was over 10 years old was still available.

This Plug-in Taxi Grant is still available¹¹ at the time of writing.

3.3 *Policies to reduce emissions from other vehicles*

In response to the urgent need to clean up London's air, TfL carried out a comprehensive study on ways to reduce air pollution from vehicles in London. As a result, the Ultra-Low Emission Zone (ULEZ) was announced in 2015 as a key tool. It will be introduced from 8 April 2019 in Central London, covering the same area as the Congestion Charging Zone (CCZ). It will operate 24 hours a day, every day of the year.

From 25 October 2021, The ULEZ will expand to the inner London area bounded by the north and south circular roads. Furthermore from 26 October 2020, the London-wide Low Emission Zone (LEZ) standards for the most heavy-polluting vehicles including buses, coaches, lorries and other specialist vehicles will be tightened to match the ULEZ standards. Please see figure 2 below for details.

¹¹ <https://www.gov.uk/plug-in-car-van-grants/what-youll-get>



Figure 2: Map of London showing ULEZ and LEZ schemes

As it was thought that the specific policies set out above in section 3.2 would be sufficient to address black cab emissions, it was decided that registered London taxis would be exempt from ULEZ.

3.4 The Current Situation

Wider policies

Significant progress has been made in managing and reducing diesel emissions across all other vehicle types. The London bus fleet is being updated with delivery of over 3,000 Ultra Low Emission double deck buses in central London by 2019 and over 250 Zero Emission single deck buses into central London by 2020. All new buses have been Euro VI since 2014 and they continue to be introduced at a rate of between 1000 and 700 per year. We are planning to re-fit around 5,000 buses so that they meet the highest emissions standards (Euro VI) as quickly as possible.

From 8 April 2019, all private hire vehicles (PHVs) travelling in the ULEZ central zone (shown in Figure 2) must meet certain emissions standards or pay a £12.50 charge per day, unless they are registered as designated wheelchair accessible vehicles by TfL. Those standards require that petrol cars, vans and minibuses must be minimum Euro 4 and diesel cars, vans and minibuses must be minimum Euro 6.

TfL will also continue its programme to install rapid charging infrastructure, which aims to accelerate the transition of London's taxi, private hire, and other commercial and private vehicles to Ultra-Low Emission Vehicles (ULEVs). TfL has delivered over 160 rapid charge points with 65 dedicated to taxis. There are plans to have delivered a total of 300 by the end of 2020. Future rapid charge points that are dedicated to ZEC taxis only will be focussed on central London and strategic routes. There are also other rapid chargers being installed in London outside of TfL's funding, as the total number of rapid chargers reported by Zapmap in December 2018 was 200. There are a further 2,200 charging units classed as fast,

standard or slow, which are more suited to times when the electric vehicle can be stationary for a longer period of time.

Enhanced delicensing scheme (2019)

In January 2019 TfL introduced an enhanced delicensing scheme offering taxi owners with eligible vehicles a one-off payment to delicense their taxi as a London taxi licensed by TfL. The new scheme operates on a first come, first served basis and provides up to £10,000 to taxi owners who delicense Euro 3, 4 or 5 vehicles early. Initially, top payments were available to the first 250 applicants. However, following high levels of interest, and informed by stakeholder workshops, the scheme has been extended and restructured, with top payments of £10,000 available to the first 1250 applicants, with tiered payment levels at higher levels available to subsequent applicants on a first come, first served basis. This is shown in Table 4.

Eligible vehicles	Number of payments available	Delicensing payment
Taxis younger than 13 years	1250	£10,000
	1100	£9,000
	850	£8,000
	500	£7,000
	400	£6,000
13 and 14-year-old taxis	1000	£1,000

Table 4: Enhanced delicensing scheme, launched in January 2019

LPG Fund

A fund has also been created for an LPG conversion grant scheme. It opened to expressions of interest in January 2019 and is expected to launch in mid-2019. This will offer 1000 payments of £5,000 for Euro 5 taxis to convert to LPG, a far cleaner fuel source. Taxis that partake in this scheme will also retain their 15-year maximum age limit.

Moving forward

The contribution to air pollution by buses, private vehicles and PHVs is steadily decreasing in part due to the range of measures set out above. However, in spite of previous steps to reduce taxi emissions, the required reduction in emissions has not been achieved. There are now just over 1,100 ZEC taxis operating in London (against the target of 9,000 ZECs by 2020) and fewer than 200 taxis have taken up the original delicensing scheme. Over the coming years, taxis will continue to make a significant contribution to levels of NOx and other pollutants, which subsequently contribute to the poor health of Londoners. If current trends in the levels of emissions from taxis continue then by 2020 they will be the largest source of road transport NOx in central London. Taxis provide a service to Londoners, visitors and tourists alike. It is therefore important that a solution is found to achieve the required reduction in emissions while maintaining the role that taxis play in our transport network.

4. The Current Consultation Proposals

4.1 Option Selection and Stakeholder Engagement

TfL undertook an option selection process looking at a range of options to achieve the necessary reduction in emissions from taxis. Table 5 below states some of the options considered and why these options were not taken forward to consultation.

Option	Reason for not developing further
Mandatory LPG conversion for all or some taxis	It was concluded that mandatory LPG conversion for some or all of the taxi fleet was not feasible on a large scale due to shortage of conversion capacity.
Including taxis in ULEZ therefore requiring taxis to pay the daily charge	Requiring taxis to pay the ULEZ charge would not guarantee delivery of the required reduction in emissions because drivers could choose to stay in the zone and pay the charge, limiting the impact on emissions. Taxis are required by law to accept all journeys and to take the shortest route, which may involve multiple trips across the ULEZ daily.
An earlier reduction in taxi age limits	<p>Reducing the taxi age limits at a quicker rate (e.g. a blanket 12 year age limit operable from 2020) was considered.</p> <p>However, this pace of change was considered to be unreasonably onerous for the taxi trade given the time period and potential economic impact on them. Setting out the proposed phased approach was considered to be a more proportionate approach whilst still tackling emissions and reaching the 2025 target. The phased approach gives drivers more time to adapt to the change in age limit, whilst still providing certainty that the required reduction in emissions would be achieved.</p>

Table 5: Alternative discounted options to achieve reduction in taxi emissions

The option selection process concluded in a package of measures that provided the greatest level of certainty of emissions savings, while also balancing the impact on the taxi trade with the speed with which any such changes could be introduced.

4.2 Proposals for reducing taxi emissions

i) Mandate the maximum operating age

The maximum age limits for vehicle licencing purposes are set out in section 5A of TfL's Conditions of Fitness¹²; the current maximum age is 15 years. A vehicle's age for these

¹² <http://content.tfl.gov.uk/taxi-conditions-of-fitness-update.pdf>

purposes is calculated from the date of first registration with the DVLA under the Vehicle Excise Registration Act 1994.

Taxi vehicle licenses may only be granted for a period of 12 months. Currently, taxis have been permitted to be licensed for 12 months up until the day before the taxi reaches 15 years old (the current maximum age). This means that taxis have been allowed to operate for up to a year beyond the maximum age limit. There are currently nearly 1,000 vehicles currently operating beyond the age limit which are all highly polluting Euro 2 and 3 vehicles.

This proposal seeks to enforce the current 15 year maximum age limit to ensure that no taxi is licensed to operate over its relevant maximum age limit e.g. into its 16th year under the current 15-year age limit.

This will be mandated by maintaining the 12 month licence for taxis as it currently operates however communicating that a taxi will need to get a new licence before its 14th birthday in order to operate into its 15th year.

It is proposed that mandating the maximum age limit will apply to any future changes in age limit, including the proposals to reduce the taxi age limit to 14 years in 2020, 13 years in 2021 and 12 years in 2022 for vehicles that do not meet the Euro 6 standard for emissions, have been newly converted to run on LPG or are purpose-built ZEC models.

This approach, if approved, will also apply to taxis already converted to LPG that can be licensed for 12 months up until the day before the taxi reaches 20 years old e.g. into its 21st year. In 2017, 17 exemptions for alternative fuel vehicles were granted.

Mandating the maximum operating age in 2019 is expected to reduce taxi NOx emissions by up to 14 per cent in central London.

If confirmed, the Conditions of Fitness will be amended to reflect the above changes.

ii) Phased age limit reduction

This proposal is a phased reduction of the taxi age limit culminating in a 12-year age limit in 2022. The below table 6 indicates the timescales for the reduction in age limit.

Age limit	Year (from 1 November)
Mandate maximum operating age (initially 15 years)	2019
14 years	2020
13 years	2021
12 years	2022

Table 6: Timescales for reduction in age limit (proposed)

The age limit for Euro 6, taxis newly converted to LPG and ZEC taxis is proposed to remain at 15 years. However, the proposal to mandate the maximum operating age would apply equally to these taxis.

The phased age limit reductions are expected to reduce taxi NOx emissions in central London by around an additional 20 per cent in 2020 and an additional 28 per cent in 2025 when compared to the level of emissions expected if we did not introduce these policies. This would be sufficient to meet legal limit levels by 2025.

Changes to the current permitted age limit extensions/exemptions

Although the maximum allowable age limit for a taxi is already 15 years, it is possible for a taxi owner to apply for an exemption to this limit, and to extend the permissible operating life of their taxi. TfL's Conditions of Fitness allow for exemptions and extensions to the maximum age limit following a request by the applicant and where, having regard to exceptional circumstances, the exemption/extension is considered reasonable.

To date this has been permitted as a matter of policy in the following circumstances. TfL proposes removing these "category exemptions" so that TfL will have a policy that a vehicle will not normally be granted an exemption/extension simply because it falls within one of them. Exemptions and/or extensions to the current applicable age limit will only be granted in exceptional circumstances, where it is considered reasonable to do so.

iii) Remove the current extenuating/hardship exemption

There is currently an arrangement whereby taxi drivers can apply for an extension of their taxi licence under extenuating/hardship circumstances. In 2017 approximately 70 drivers applied for an extension to their licence based on extenuating/hardship circumstances.

This exemption was introduced in 2012 to allow for consideration, on a case by case basis, for an exemption to the age limit to allow an additional 12 month license. This was for taxi vehicle owners in cases of exceptional hardship e.g. medical.

iv) Remove the alternative fuel conversion age limit exemption

Under current arrangements, taxis converted to run on LPG, CNG or biomethane are granted an additional five years to the 15-year age limit. This extends the age limit to 20 years for these vehicles. This is in order to provide vehicle owners with a period of time with which to earn back the cost of conversion.

In 2017, 17 vehicles applied for an extension to their licence based on an alternative fuel conversion.

It is proposed that this exemption is removed. However newly converted LPG taxis will not be subject to the proposed reduction in age limits and would instead be subject to a 15-year age limit in recognition of their significantly lower emissions.

The change to the LPG age limit from 20 to 15 years would only apply to newly converted taxis. Taxis that have already been granted the exemption will be licensed for up to 20 years.

v) Remove the historic and classic/niche age limit exemption

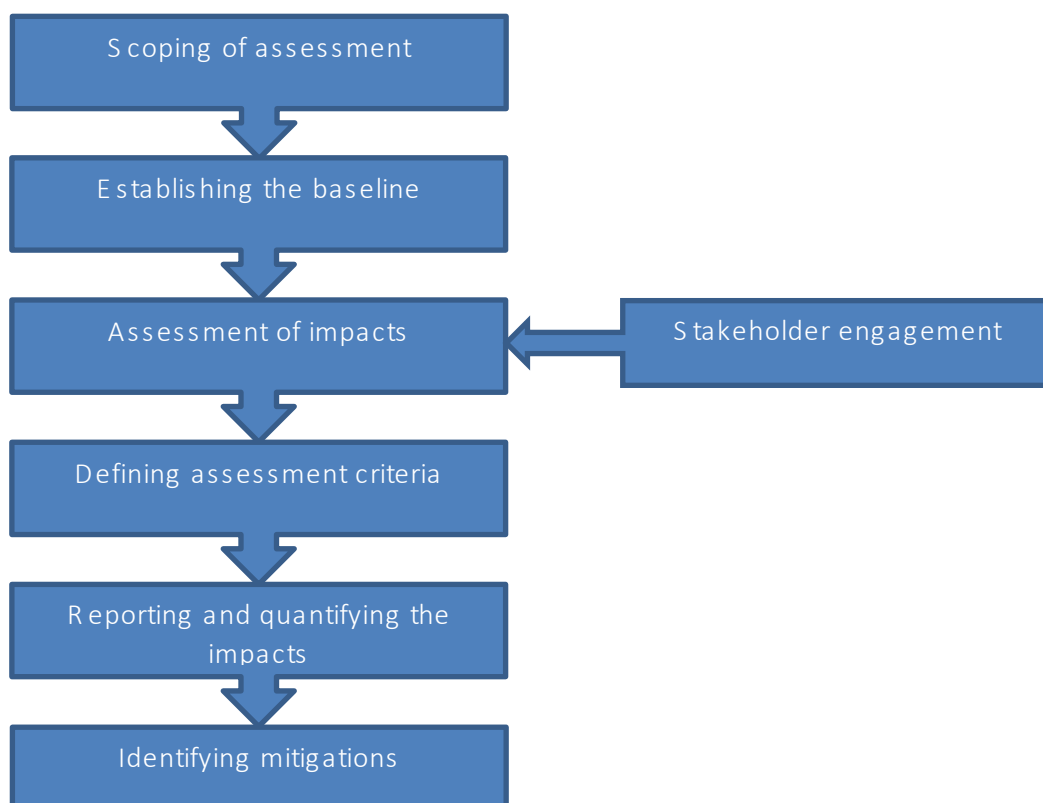
This exemption was introduced to allow Asquith taxis to operate for an additional five years. However, there are no longer any licensed taxis which are eligible for this exemption.

5. Method of Assessment

5.1 Purpose of this Integrated Impact Assessment

TfL has carried out an Integrated Impact Assessment (IIA) of the proposals. The purpose of this was to inform decision makers about the likely significant positive and negative potential impacts that proposals may have. It looked at the impact the proposals could have on the environment, health and equality, and the economy; taking into consideration the views of industry stakeholders. Through this process it enabled identification of amendments to the proposals or mitigation that could help to minimise any negative impacts or maximise positive impacts.

5.2 Stages of Assessment



5.3 Scoping of Assessment

i) Identification of Assessment Groups

The assessment team identified groups that might be affected by the proposals. The groups identified were: taxi drivers, taxi fleet owners, taxis passengers, vehicle manufacturers, pedestrians and road users, and 'other' which includes resident and businesses. These groups may experience the greatest impacts if the proposals are implemented, both positive and negative. The assessment looked at the potential impacts of the proposals on these groups.

ii) Categories of Assessment

The assessment was split into three categories: London’s environment, including air quality, carbon and the natural environment; London’s health and equality, including health, equalities and safety; and London’s economy, including economic and business impacts. Table 7 sets out what was assessed under each category.

The “health and equality” category looked at protected characteristic groups. This enabled the team to understand how the proposals could impact protected characteristic groups (age, disability, sex, race, pregnancy or maternity, gender reassignment, religion or belief, and sexual orientation). It also demonstrates how TfL has met a legal responsibility under the Public Sector Equality Duty¹³ (PSED) to have due regard to three outcomes when exercising its functions: (1) the need to eliminate unlawful discrimination, harassment and victimisation; (2) to advance equality of opportunity between those who share a protected characteristic and those who do not; and (3) to foster good relations between such people. Compliance with the PSED may involve, in particular, removing or minimising any disadvantage suffered by those who share a relevant protected characteristic, taking steps to meet the needs of such people and encouraging them to participate in public life or in any other activity where their participation is disproportionately low, including tackling prejudice and promoting understanding.

5.4 Baseline

The assessment looked at the baseline for each category. The baseline sets out the existing situation, which enables an assessment of the effects of the proposals should they be introduced.

5.5 Assessment of Impacts

Table 7 below shows the framework for assessment. It looks at the topics that were assessed for each category with a justification for why each topic was included. Stakeholder consultation and the responses received formed part of the assessment process.

Proposal	Assessment Group	Assessment of Impacts	
		Topic Assessed	Justification
Category: Environment			
1. Mandate Maximum Operating Age; 2. Phased age limit restriction 3. Remove hardship exemption 4. Remove current alternative fuel age limit 5. Remove	<ul style="list-style-type: none"> • Taxi drivers • Taxi fleet owners • Taxi manufacturers • Taxi passengers • Pedestrian and road users • Other (residents and businesses) 	Air quality	One of the main objectives of the proposals is to reduce emissions of NOx and PM
		CO ₂	A reduction in number of diesel taxis likely to impact on CO ₂ emissions
		Traffic noise	A reduced number of diesel taxis and increased numbers of ZEC taxis might impact noise
		Sustainable resource use and waste	Removal of oldest taxis may increase scrappage rates

¹³ Section 149 of the Equality Act 2010

historic/niche vehicle age limit exemption			
Category: Health and equality			
1. Mandate Maximum Operating Age; 2. Phased age limit restriction 3. Remove hardship exemption 4. Remove current alternative fuel age limit 5. Remove historic/niche vehicle age limit exemption	<ul style="list-style-type: none"> • Taxi drivers • Taxi fleet owners • Taxi manufacturers • Taxi passengers • Pedestrian and road users • Other (residents and businesses) 	Accessibility and active travel	Changes in taxi numbers and availability may impact accessibility and active travel
		Safety and crime	Changes in taxi availability particularly at night might impact safety and crime
		Access to healthcare and social infrastructure	Reduced numbers of taxis may impact on access to healthcare and social infrastructure
		Protected characteristics	Changes to the supply of taxis might especially impact those with protected characteristics
		Deprivation	The proposals might impact individuals working in the taxi trade and their ability to meet their needs
		Stress	Increased driver working hours and concerns around income may impact on stress
Category: Economy			
1. Mandate Maximum Operating Age; 2. Phased age limit restriction 3. Remove hardship exemption 4. Remove current alternative fuel age limit 5. Remove historic/niche vehicle age limit exemption	<ul style="list-style-type: none"> • Taxi drivers • Taxi fleet owners • Taxi manufacturers • Taxi passengers • Pedestrian and road users • Other (residents and businesses) 	Individual livelihood	There could be impact on individual livelihood for drivers who delicense early than had anticipated, and potentially switch vehicles
		Impact on London economy	There could be an impact if there is a reduction in the number of taxis across London

Table 7: Framework for assessment

The likely impacts on air quality (NO_x, PM and CO₂), traffic noise and sustainable resource use and waste have been assessed. The natural environment (i.e. landscape, flood risk, ecology etc) is commonly included in environmental impact assessment under the

environment category, however for the purpose of this IIA due to the likely negligible impact on the natural environment as a result of the proposals it was not assessed.

5.6 Stakeholder engagement

Key stakeholders were invited to discuss the proposals and the impacts to inform the Integrated Impact Assessment (IIA). Workshops were held in the week commencing 14th January 2019 with taxi trade associations, taxi fleet owners and taxi manufacturers. These workshops were attended by 26 stakeholders. This process ensured that stakeholder judgement, experience and knowledge were an integral part of the assessment process for the IIA.

5.7 Assessment Criteria

The potential impact on assessment groups was evaluated in three ways: scale and distribution, sensitivity and temporality. These are explained below. Table 8 shows how they are reported.

- i) Scale and distribution: this looks at the extent to which an assessment group would be impacted by the proposals including the range and number of affected individuals.
- ii) Sensitivity of assessment group: this looks at how the assessment groups might respond to an impact, whether they are able to absorb or adapt to the proposed changes. If the affected group has no alternatives and as such, will be greatly impacted by the proposal then it is considered to have a high sensitivity.
- iii) Temporality: the temporality of the impact considers whether an impact is likely to be short-term, medium-term or long-term. If the proposal will impact the majority of an assessment group for an extended period of time then it is considered to be a long-term impact.

Proposal	Assessment group	Description of Potential Impact	Scale and distribution of impact	Sensitivity of Assessment group	Temporality of impact

Table 8: Sample table to show reporting framework of the assessment

5.8 Reporting and Quantifying the Impacts

Based on the outcome of the assessment, the impact of the proposals on each group was quantified using a seven-point scale. The seven-point scale is explained in Table 9 below.

Rating number	Rating	Description
+3	Major positive impact	Permanent positive impact across multiple groups
+2	Moderate positive impact	Positive impact experienced by a number of groups
+1	Minor positive impact	Positive impact experienced by some groups over the short-term
0	Neutral	No significant positive or negative impact

-1	Minor negative impact	Negative impact experienced by some groups over the short-term
-2	Moderate negative impact	Negative impact experienced by a number of groups
-3	Major negative impact	Permanent negative impact across multiple groups

Table 9: Seven-point scale for impact assessment

5.9 Identifying mitigation

The final stage of the method of assessment is to identify any mitigation that may minimise the impact of the proposals if they are implemented. This mitigation has been identified in the production of this document through research and engagement with the taxi trade, including manufacturers and fleet owners.

6. Baseline

6.1 Environment

Air Quality

Chapter three explains that air pollution is a key contributory factor to the health of Londoners. Air pollution refers to substances in the air that harm human health, welfare, plant or animal life. London has an air pollution problem responsible for over 9,000 premature deaths every year¹⁴. Approximately 50 per cent of air pollution comes from road transport¹⁵.

Road transport related pollutants with direct links to health effects are Nitrogen Dioxide (NO₂) and Particulate Matter (PM10 and PM2.5). Exposure to elevated concentrations of NO₂ has been linked with a range of respiratory symptoms, including decreases in immune defence, which can lead to susceptibility to respiratory infection.

Research produced in 2015 by King's College London has assisted with understanding the exposure of Londoners to air pollution and the associated public health impacts. The report identified the total mortality burden of anthropogenic PM2.5 and NO₂ as shown in table 10.

Pollutant (2010 concentration)	Years of life lost ¹⁶
Anthropogenic ¹⁷ PM _{2.5}	52,630
NO ₂ ¹⁸	88,113

Table 10: mortality burden of PM2.5 and NO₂ in London¹⁹

The study by King's College is the most recently publicised study²⁰ which estimated impacts in London specifically. A more recent Europe-wide report also emphasises the continued adverse health impacts of poor air quality, particularly in urban areas.

It is not possible to state the number of people who are killed solely from exposure to air pollution as air pollution is not the sole cause of any individual death. Rather, air pollution is one of several contributing factors that an individual might experience over their life, all of which increase their risk of an earlier death.

Scientific studies have looked at differences between large groups of people living in places with varying levels of air pollution, and from this they are able to estimate how many extra deaths across the population are associated with various levels of air pollution. These studies are of good quality and they consistently show that exposure to air pollution, even at relatively low levels, is associated with premature death i.e. people are dying earlier than they would if air pollution levels were lower.

¹⁴ https://www.london.gov.uk/sites/default/files/hia_in_london_kingsreport_14072015_final.pdf

¹⁵ <https://www.ippr.org/files/publications/pdf/lethal-and-illegal-jul2016.pdf>

¹⁶ The Years of Life Lost (YLL) is a summary measure of premature mortality, which takes into account the age at which deaths occur, giving greater weight to deaths at a younger age and lower weight to deaths at older age.

¹⁷ Particulate Matter created by human activity

¹⁸ There is greater uncertainty around the estimates of attributable deaths and life years lost due to NO₂. The figures for NO₂ take into account the WHO estimate of up to a 30% overlap between the effects of PM2.5 and NO₂, thereby allowing the figures for PM2.5 and NO₂ to be summed.

¹⁹ https://www.london.gov.uk/sites/default/files/hia_in_london_kingsreport_14072015_final.pdf

²⁰ <https://www.eea.europa.eu/publications/air-quality-in-europe-2018>

Mortality is not the only air pollution related health effect. The Kings report estimated that in 2010 PM_{2.5} and NO₂ were associated with approximately 1990 and 420 respiratory hospital admissions respectively with an additional 740 cardiovascular hospital admissions associated with PM_{2.5}.

The Kings report also estimated economic costs of the above health impacts to range from £1.4 billion (long-term exposure to PM_{2.5} and mortality; short-term exposure to PM_{2.5} and hospital admissions; short-term exposure to NO₂ and both deaths brought forward and hospital admissions) to £3.7 billion (replacing short-term exposure to NO₂ and deaths brought forward with long-term exposure to NO₂ and mortality).

Diesel vehicles are the most significant source of NO_x emissions, which contribute to high levels of NO₂²¹. Research by the International Council on Clean Transportation has shown that 'real-world emissions'²² from London taxis can be seven times higher than their Euro standard certification limits, exceeding the levels measured by diesel passenger cars.

As a result of high levels of NO_x emissions roadside concentrations of NO₂ are above the EU legal limits at many locations. Figures 3 and 4 show the predicted mean annual concentrations of NO₂ in 2020 and 2025 (without the implementation of the proposals outlined in this document). These figures show that the number of roads in breach of the EU limit values is decreasing but in 2025 there are still a large number of locations which do exceed, especially in central London and along major road corridors. Further action is required in order to tackle this problem.

²¹ https://www.london.gov.uk/sites/default/files/air_quality.pdf

²² Emissions resulting from everyday driving in and around a city making multiple stops, starts and waiting in traffic

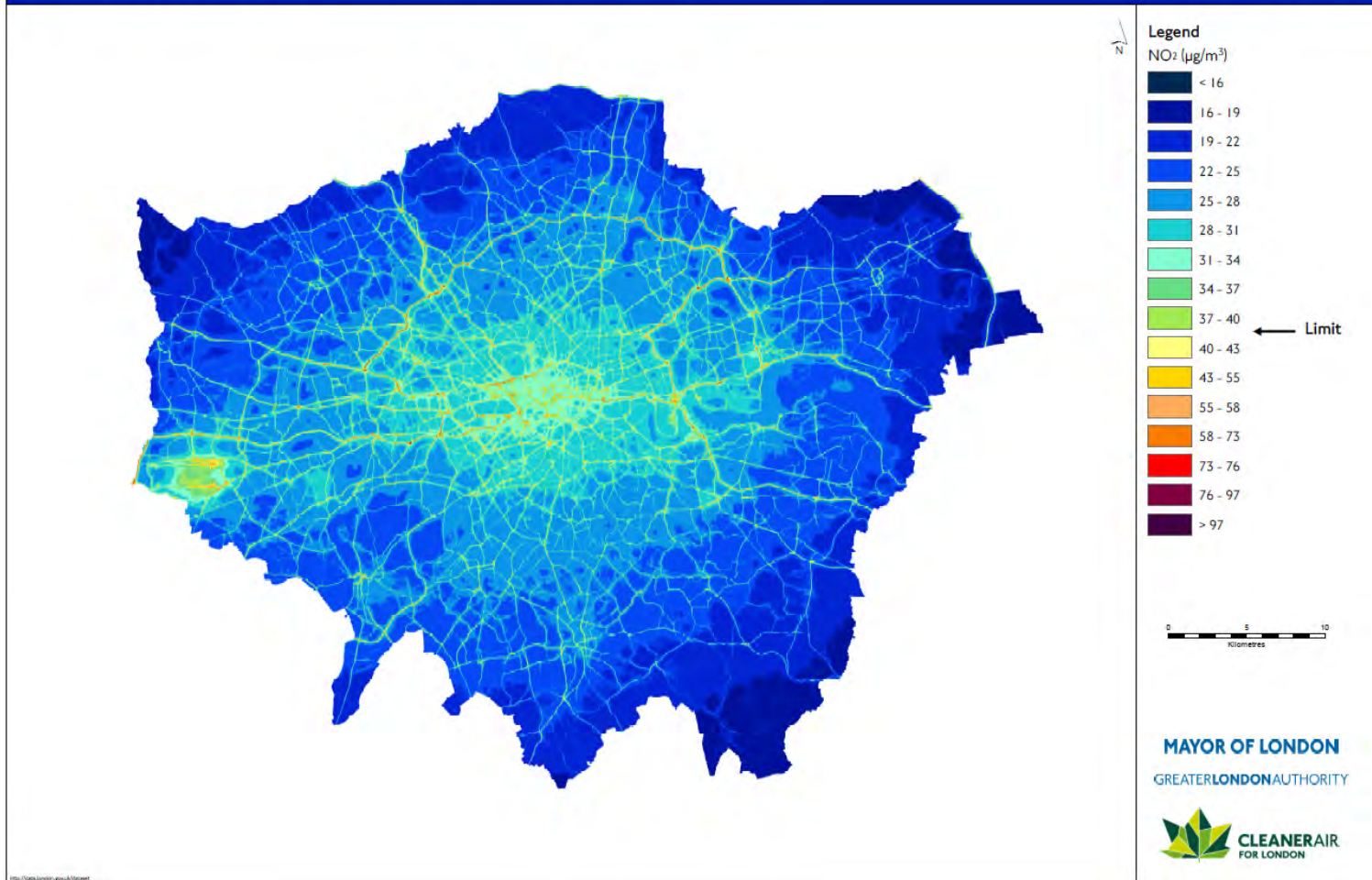


Figure 3: Annual mean NO₂ concentrations across London in 2020

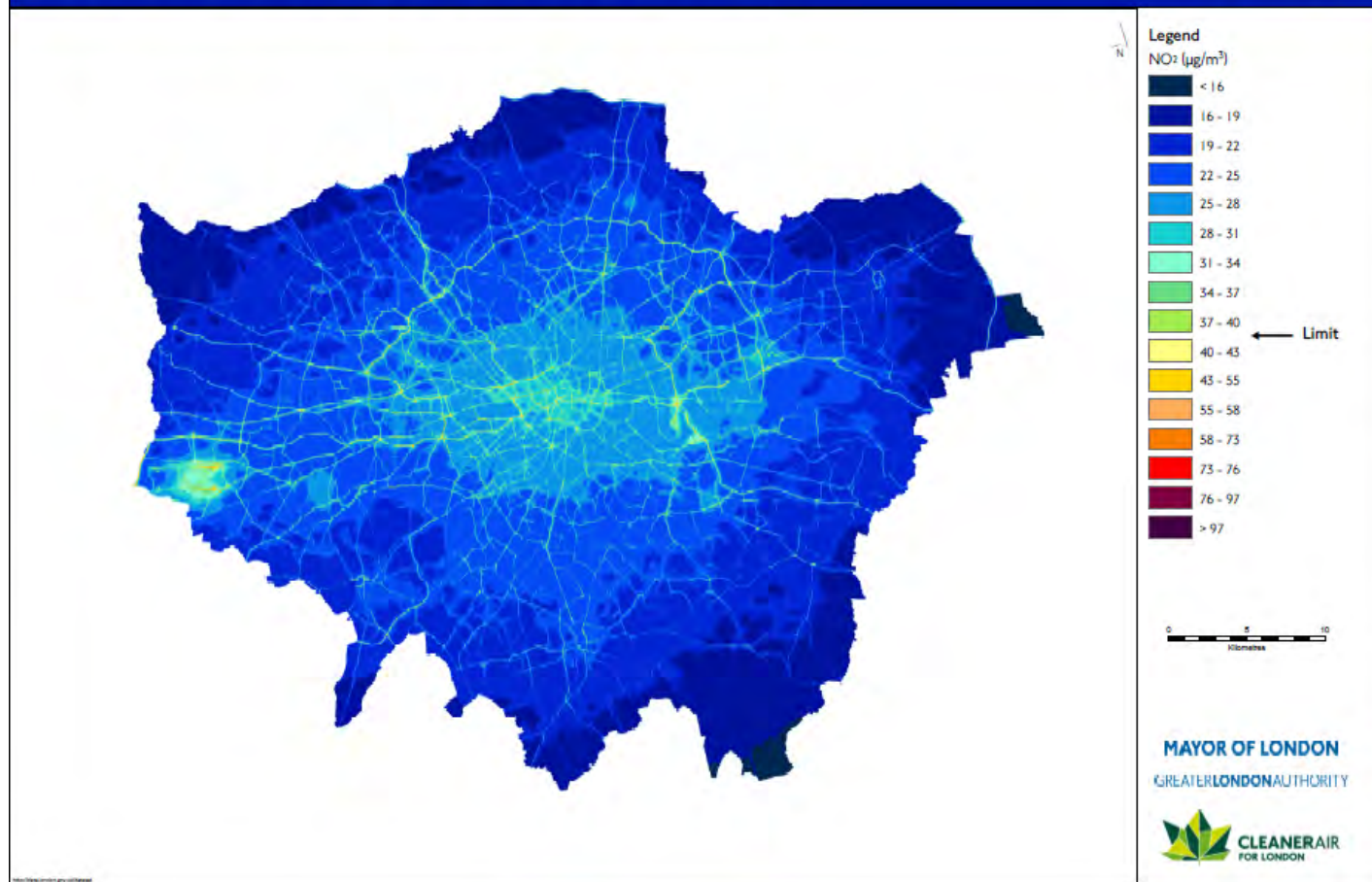


Figure 4: Annual mean NO₂ concentrations across London in 2025

CO₂

TfL estimates that taxis in central London currently emit approximately 33kT of CO₂ per year (from tailpipe)²³.

PM10

Exhaust emissions of PM10 from taxis in central London are currently 2.8T²⁴.

Noise

The British Medical Association (BMA) have highlighted that after air quality, noise pollution is considered to be the second largest environmental cause of health problems, and road traffic is a major cause of noise pollution in London²⁵. Consistently high sound levels can cause hearing impairment, ischemic heart disease, hypertension, stress and sleep disturbance. Traffic noise disproportionately affects the most vulnerable, in particular impacting children's school performance, memory and concentration²⁶. Increased noise can also make walking, cycling and using public transport less pleasant. Reducing the noise impacts of traffic will directly benefit health and help to improve street ambience.

A move towards electric vehicles in the long run may also have a positive effect on noise pollution. At low speeds, such as in cities, electric vehicles have a much quieter engine than conventional vehicles although it should be noted that at higher speeds (such as 50km/h and above) the difference is negligible²⁷.

Sustainable resource use and waste

The number of vehicles leaving the operational taxi fleet is in the region of 1,000 vehicles per year (based on natural churn). TfL does not hold data on the proportion of taxis which are scrapped or resold for use as taxis outside of London.

6.2 Health and equality

Accessibility and active travel

Accessibility describes how easy it is to travel around. In London, taxis have a role to play in the capital's accessibility. All taxis are fitted with a wheelchair ramp plus other accessibility features to assist disabled passengers, which is a considerable benefit for those travelling around the city.

The Extra Costs Commission was a year-long independent inquiry launched in response to research done by the charity Scope regarding the financial penalty faced by disabled people

²³ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

²⁴ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

²⁵ British Medical Association (2012): '*Healthy transport = Healthy lives*'. Available at: file:///C:/Users/FOW84558/AppData/Local/Packages/Microsoft.MicrosofEdge_8wekyb3d8bbwe/TempState/Downloads/healthytransportthehealthylives.pdf

²⁶ <http://content.tfl.gov.uk/healthy-streets-for-london.pdf>

²⁷ European Environment Agency (2016): '*Electric Vehicles in Europe*'. Available at: <https://www.eea.europa.eu/publications/electric-vehicles-in-europe>

and their families in England and Wales. It reported that disabled people use taxis and PHVs approximately 67 per cent more frequently than non-disabled people²⁸.

Active travel refers to walking and cycling. The Mayor’s Transport Strategy includes a number of policies and proposals that are designed to increase levels of walking and cycling. Taxis are not considered an active mode of travel.

Safety and crime

Taxis play an important role in facilitating the safe travel of individuals late at night when the level of public transport provision is reduced and the perceived fear of crime is higher.

TfL has a duty under Section 17(1) of the Crime and Disorder Act 1998 to take steps to prevent the following matters in its area: crime and disorder; drug, alcohol and substance abuse; and reoffending. The area for TfL is Greater London.

Access to healthcare and social infrastructure

Taxis have a role to play in terms of access to healthcare and social infrastructure across London. For those attending hospital appointments who are less mobile and do not have their own form of transport, particularly those in wheelchairs, taxis may be one of the only travel options.

Protected characteristics

As mentioned in section 5.3, protected characteristic groups include; age, disability, sex, race, pregnancy and maternity, gender reassignment, religion or belief, sexual orientation. This IIA aims to demonstrate that TfL has met its legal responsibilities under the Public Sector Equality Duty. Table 11 provides some statistics about the potential level of sensitivity of each of the groups divided according to whether the impacts would be felt by taxi passengers or drivers.

Protected characteristic	Taxi passengers	Taxi drivers
Age	Londoners aged 30-54 use taxis most often with Londoners aged 16-19 using taxis least often ²⁹	Approximately 27 per cent of taxi drivers are over 60 ³⁰
Disability	22 per cent of London residents who use taxis report having a disability ³¹	No information
Sex	59 per cent of taxi passengers are male ³²	98 per cent of taxi drivers are male ³³
Race	Two per cent of BAME Londoners use taxis at least once a week, compared to	Approximately 85 per cent of taxi drivers are white ³⁵

²⁸ Scope (2015): ‘Driving down the cost of taxis and PHVs for disabled people: Interim report’. Available at: <https://www.scope.org.uk/Scope/media/Interim-report/Interim-report.pdf>

²⁹ TPH user data

³⁰ TPH driver data

³¹ TPH user data

³² TPH user data

³³ TPH driver data

	five per cent for all Londoners ³⁴	
Pregnancy and maternity	No information	No information
Gender reassignment	No information	No information
Religion or belief	No information	No information
Sexual orientation	No information	No information

Table 11: Statistics about taxi passengers and taxi drivers

Deprivation

The map below shows where taxi drivers live and levels of deprivation across London. Red shading shows where there are high proportions of taxi drivers living, white where there are none or few. Deprivation is shown by blue outlines of postcode areas, with darker blue indicating more deprived areas. The map shows that in general, taxi drivers are not living in the most deprived areas of London. 18 per cent of London resident taxi drivers live in the top 20 per cent most deprived Lower Layer Super Output Areas (LSOAs).

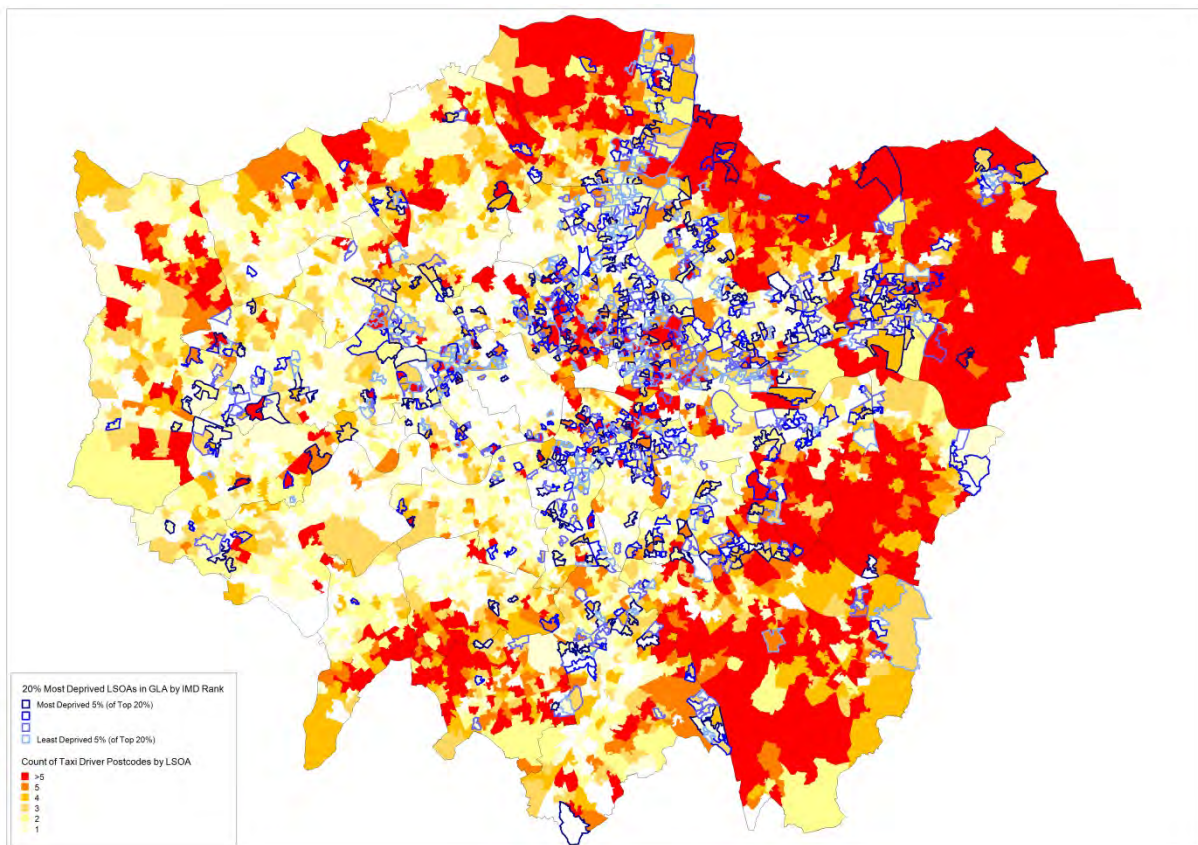


Figure 5: Map to show taxi driver postcodes and levels of deprivation at LSOA level

Stress

The Organisation for Economic Cooperation and Development (OECD) highlighted that income and wealth play a role in both the health and well-being of individuals³⁵. Concerns around income and wealth may also result in direct health issues such as increased stress.

³⁵ TPH driver data - this includes white British, white Irish and white other. Individuals who did not disclose their ethnicity were not included in the percentage calculation.

³⁴ http://source.tfl/pdfs/300915_travel_in_london_understanding_our_diverse_communities_v4.0.pdf

6.3 Economy

Individual livelihood

Livelihood refers to the way one earns money, to support themselves. For some taxi drivers, driving their cab is their only livelihood, for others they drive part time and have a second job.

TfL does not hold information regarding individual driver income and expenditure. The overall number of licensed taxi drivers has, though, remained fairly constant since 2001, as shown in Figure 7 below.

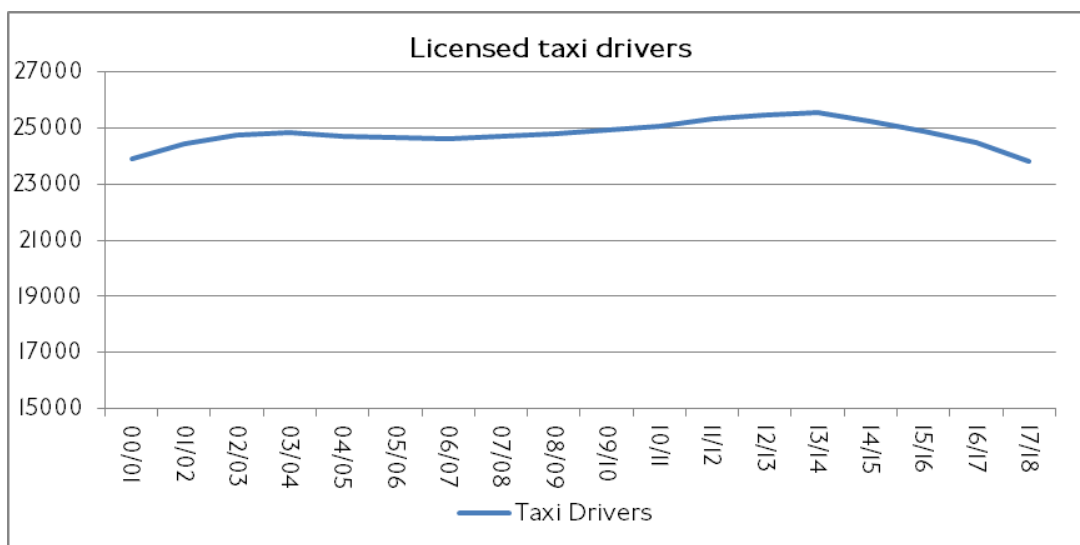


Figure 6: Number of licensed taxi drivers

There is information available that indicates that the taxi industry has become less profitable in recent years. Across Greater London on an average day in 2016/17, there were 109,000 taxi trips. This has more than halved since 2001 when over 250,000 trips were undertaken on an average day³⁷.

More recently there have also been changes in the number of average trips per day undertaken by individual drivers. In 2009, the average number of trips was 11.5 compared to 8.3 in 2016/17 with less than one per cent of drivers doing over 20 trips per day in 2016/17 compared to six per cent in 2009³⁸.

This has, however, been alongside an increase in the number of taxi drivers working 40 hours or more. The average hours worked per week has increased by just over three hours from 39.3 to 42.7 hours from 2009 to 2016/17. The proportion of drivers working over sixty hours per week has also increased³⁹. Table 12 shows the average percentage of hours worked per week by London taxi drivers.

³⁶ OECD (2013): 'Framework for statistics on the distribution of household income, consumption and wealth'. (https://read.oecd-ilibrary.org/economics/framework-for-statistics-on-the-distribution-of-household-income-consumption-and-wealth_9789264194830-en#page1)

³⁷ TPH market data

³⁸ TPH market data

³⁹ TPH driver data

Number of hours worked per week	All London	Suburban	All
10 hours or less	2.4%	1.8%	2.3%
11-20 hours	5.9%	5.5%	5.8%
21-30 hours	12.8%	16.4%	13.3%
31-40 hours	28.3%	21.8%	27.4%
41-50 hours	28.3%	21.8%	27.4%
51-60 hours	19.2%	12.7%	18.4%
60+ hours	3.2%	20.0%	5.3%
Average hours worked per day	8.92	8.56	8.87
Average hours worked per week	42.3	45.2	42.7

Table 12: Average number of hours worked by London taxi drivers

TfL also has data on the number of days worked per week by taxi drivers. Just over 21 per cent of all taxi drivers work a six-day week with almost two per cent working a full seven days. The average number of days worked per week is shown in Table 13.

Number of days worked per week	All London	Suburban	All
1	0.5%	0.0%	0.5%
2	4.3%	0.0%	3.7%
3	7.7%	1.8%	7.0%
4	19.2%	18.2%	19.1%
5	47.7%	38.2%	46.5%
6	18.9%	38.2%	21.4%
7	1.6%	3.6%	1.9%
Average number of days	4.7	5.2	4.8

Table 13: Number of days worked per week by London taxi drivers ⁴⁰

It is for taxi drivers to choose their hours and days per week of work. The above suggests that drivers may be working longer hours and more days a week in order to generate enough trips to reach a certain level of income.

London's economy

London's taxis provide a reliable service to Londoners, tourists and business people from home and abroad. They offer customers safety, convenience and knowledge of London's streets.

Taxis provide support to business travel in London, as well as entertainment and tourism. The purpose of taxi journeys varies significantly by time of day. Travel to or from workplaces and business trips make up over half (53.4 per cent) of all weekday daytime taxi trips,

⁴⁰ TPH market data

whereas weekend daytime and evenings are dominated by entertainment and tourism (45.2 per cent)⁴¹.

On average, across both driver licence types, almost a quarter of journeys involve taking passengers to/from their usual workplace. This is shown in Table 14.

Journey purpose	All London	Suburban	All
Entertainment	22.9%	18.6%	22.5%
To/from usual workplace	23.7%	27.7%	24.1%
Business trip	22.5%	10.6%	21.3%
Tourism	9.3%	2.7%	8.6%
To/from school/college/university	2.7%	2.4%	2.6%
Shopping	8.1%	12.4%	8.6%
Collect/deliver item	0.4%	0.6%	0.4%
Accompany somebody/collect somebody	0.7%	1.4%	0.7%
Other	9.8%	23.6%	11.2%
Sample size	5,383	635	6,018

Table 14: Average taxi journey purpose ⁴²

⁴¹ TPH market data

⁴² TPH market data

7. Impacts of the proposals

This chapter is structured by 'Category of assessment'. Within each 'category of assessment' a description of impacts is provided which covers the proposals to mandate the maximum operating age and the phased age limit reductions. The impacts of the proposals to remove the exemptions for hardship, classic/niche vehicles and alternative fuels are included in the summary table only. The summary table is structured by 'topic' and includes the likely significant impacts on each user group as a result of each proposal. Impacts were assessed a number of assessors independently and agreed. The scoring was informed by the research outlined in this report, as well as stakeholder workshops. It encompasses a range of quantitative and qualitative information. The IIA and scores therein have been separately reviewed by an independent consultant to ensure impartiality.

7.1 *Environment*

The proposals have a positive impact on many of the issues included in the environment assessment as a result of the reduced levels of tailpipe emissions expected.

Air Quality

The proposals seek to improve air quality and subsequently, human health. Figure 8 below shows the reductions in NO_x emissions in 2020 and 2025, which are expected as a result of the mandated age limit expiry and phased age limit reduction proposals.

Following the 2015 consultation on reduced taxi age limits, it was hoped that the introduction of a delicensing scheme, alongside grants for ZEC taxis and a 15 year age limit would be enough to meet the 2020 target of a 45 per cent reduction in taxi NO_x emissions through significant ZEC uptake of 9,000 vehicles by 2020 and older vehicles leaving the fleet. It is now clear that the 2020 target will not be met, which is why TfL have developed the proposals to reduce taxi age limits – accelerating progress towards the 2020 target and ensuring that the 2025 target is not missed.

The phased age limit reductions (in addition to the benefits resulting from the natural churn in the fleet in line with current trends) are expected to result in a 20 per cent reduction in NO_x by 2020 and a 28 per cent reduction by 2025 in central London when compared to the level of emissions expected if these policies were not introduced⁴³. This leads to a total reduction in taxi emissions of 27 per cent by 2020 and 70 per cent by 2025, as shown in Figure 8 below.

⁴³ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data

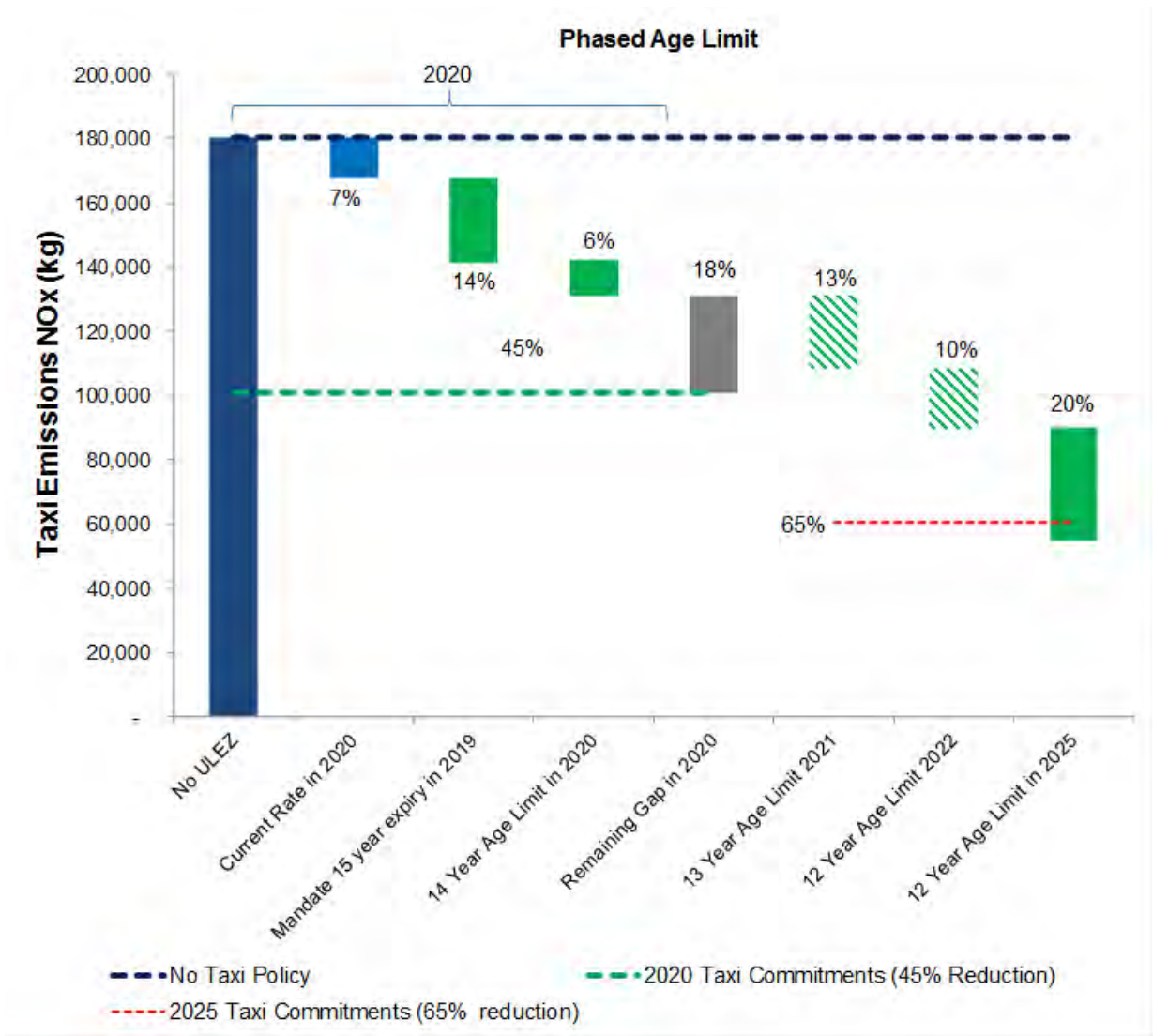


Figure 7: Reductions in NOx emissions as a result of the age limit reduction

PM10

TfL estimates that exhaust emissions of PM10 from taxis in central London will reduce from 2.8T (currently) to 0.5T in 2025 without the policy, and 0.14T with the proposed reductions in age limits⁴⁴.

CO₂

TfL estimates that tailpipe CO₂ emissions from taxis in central London will reduce from 33kT (currently) to 22kT in 2025 without the age limit policies and 13kT with the proposed reductions in age limits⁴⁵.

Noise

The proposals, if implemented, will result in many of the oldest vehicles leaving the fleet earlier than is currently expected. The proposals are also expected to result in the uptake of

⁴⁴ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

⁴⁵ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

the quieter ZEC taxis. This is expected to have a small but positive impact on noise, especially in central London where the taxis make up c. 18 per cent of vehicle-km driven⁴⁶.

Sustainable resource use and waste

In recent years churn in the fleet has led to an average of around 1,000 vehicles per year delicensing and leaving the fleet. It is expected that this would increase as a result of the age limit proposals to approximately 2,500 – 3,000 vehicles per year from 2020 to 2022 and thereafter reducing to just over 1,000. The maximum impact of the proposals assumes that all the taxis which are delicensed are scrapped (this is unlikely as some vehicles may be sold and re-licensed in other areas) and represents the uplift in scrappage rates above the typical churn rate. This equates to a maximum of 1,500 vehicles per year in 2020 to 2022.

Taxis weigh approximately two tonnes, which means that the maximum additional quantity of waste that would need to be scrapped would be 3,000 tonnes. This is well within the estimated volume of spare capacity of treatment facilities within the M25 which is between 2,075,000 and 6,225,000 tonnes per year.

|

Proposal	Affected user	Scoped in/out	Description of the impacts	Scale and distribution of impact	Sensitivity of impact	Temporality of impact	Agreed Impact rating
				(low, med, high)	(low, med, high)	(short, med, long)	(+3 to -3)
Environment							
Mandate maximum operating age	Taxi drivers	In	<p>This proposal is expected to have a positive impact on the Environment category of assessment as a result of the reduction in emissions, including NOx emissions resulting from the removal of taxis operating above the age limit.</p> <ul style="list-style-type: none"> Mandating the maximum operating age in 2019 is expected to reduce taxi NOx emissions by around 14 per cent in central London⁴⁷, this will result in benefits to anyone who lives, works or visits London would benefit from improved air quality as a result of these proposals. The scale of benefit felt will depend on the level of exposure felt by that group to harmful emissions, especially in central London. Taxi drivers, taxi passengers and pedestrians will experience a significant benefit as a result of the improvement in air quality. It may also result in a small noise benefit as a result of the switch from diesel to ZEC taxis There will be a minimal impact on sustainable resource use as additional scrappage requirements are well within available capacity⁴⁸ 	Med	High	Med	+2
	Taxi fleet owners	In		Low	Low	Med	+1
	Taxi manufacturers	In		Low	Low	Med	+1
	Taxi passengers	In		Med	Med	Med	+2
	Pedestrians and road users	In		High	Med	Med	+2
	Other (residents and businesses)	In		Med	Low	Med	+2
Phased age limit reduction	Taxi drivers	In	<p>This proposal is expected to have a positive impact on the Environment category of assessment as a result of the reduction in emissions, including NOx emissions resulting from the removal of taxis operating above the age limit. The impacts felt will be larger than for the mandating the maximum operating age proposal due to the fact that more vehicles are affected by the phased age limit reductions.</p> <ul style="list-style-type: none"> The phased age limit reductions are expected to reduce taxi NOx emissions in central London by around an additional 20 per cent in 2020 and 28 per cent in 2025 when compared to the level of emissions expected if we did not introduce these policies⁴⁹. Anyone who lives, works or visits London would benefit from improved air quality as a result of this proposal. The level of benefit felt will depend on the level of exposure felt by that group to harmful emissions, especially in central London. Taxi drivers, taxi passengers and pedestrians will experience a significant benefit as a result of the improvement in air quality. It may also result in a small noise benefit as a result of the switch from diesel to ZEC taxis. There will be a minimal impact on sustainable resource use as additional scrappage requirements are well within available capacity⁵⁰ 	High	High	Med	+3
	Taxi fleet owners	In		Low	Low	Med	+1
	Taxi manufacturers	In		Low	Low	Med	+1
	Taxi passengers	In		Med	Med	Med	+2
	Pedestrians and road users	In		High	Med	Med	+3
	Other (residents and businesses)	In		Med	Low	Med	+2
Remove the hardship exemption	Taxi drivers	In	<p>This proposal is expected to have a small positive impact as a result of a reduction in NOx emissions due to a small reduction in the number of the very oldest vehicles.</p>	Low	High	Med	+1
	Taxi fleet owners	In		Low	Low	Med	+1
	Taxi manufacturers	In		Low	Low	Med	+1
	Taxi passengers	In		Low	Med	Med	+1
	Pedestrians and road users	In		Low	Med	Med	+1

⁴⁷ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

⁴⁸ Ultra Low Emission Zone - Further Proposals, Jacobs 2017

⁴⁹ Estimates based on 2013 London Atmospheric Emissions Inventory (LAEI) and TfL taxi fleet data.

	Other (residents and businesses)	In		Low	Low	Med	+1
Remove the current alternative fuel conversion age limit exemption	Taxi drivers	In	Although LPG taxis have lower NOx emissions than diesel taxis they have higher emissions than ZEC taxis and so there will be a benefit from LPG taxis not operating for up to 20 years and drivers potentially being encouraged to purchase ZEC taxis. Therefore this proposal is expected to result in a small improvement in air quality and anyone who lives, works or visits London will experience a health benefit as a result of it.	Low	High	Med	+1
	Taxi fleet owners	In		Low	Low	Med	+1
	Taxi manufacturers	In		Low	Low	Med	+1
	Taxi passengers	In		Low	Med	Med	+1
	Pedestrians and road users	In		Low	Med	Med	+1
	Other (residents and businesses)	In		Low	Low	Med	+1
Remove the historic and classic/niche vehicles age limit exemption	Taxi drivers	Out	The environmental impact on this proposal has been scoped out as there are currently no taxis licensed which are eligible to receive the historic and classic/niche vehicle age limit exemption. No taxis licensed in the future would be eligible either.				
	Taxi fleet owners	Out					
	Taxi manufacturers	Out					
	Taxi passengers	Out					
	Pedestrians and road users	Out					
	Other (residents and businesses)	Out					

7.2 Health and Equality

The proposals will result in older taxis leaving the fleet earlier than previously planned. If these older vehicles are not replaced by younger vehicles then the overall size of the fleet will reduce. This would result in improved air quality but may also reduce the availability of taxis in London. As a result it could have a negative impact on many of the issues included in the 'health and equality' topic of assessment.

This section will consider health and equality impacts of the proposals under the following topics:

Accessibility and active travel

Accessibility is the ability to be reached or obtained easily. If the proposals result in a reduction in the size of the taxi fleet then there may be a minor reduction in accessibility for London's transport, particularly for those who require wheelchair accessible vehicles, or vehicles with accessibility features. Conversely this might have a positive impact on active travel with some people potentially choosing to walk or cycle instead of travelling by taxi if there are feasible options for their journey.

Safety and crime

If the proposals result in a reduction in the size of the taxi fleet then there may be a small negative impact on safety and crime, particularly on female passengers and trans passengers travelling at night if the supply of available taxis decreases, or wait times increase. There are a number of alternatives to travelling by taxi at night, including by private hire vehicle which are typically more active during the evening / overnight than taxis.

Access to healthcare and social infrastructure

If the proposals result in a reduction in the size of the taxi fleet then there might be a minor negative impact on access to healthcare and social infrastructure. TfL does not hold any data on the proportion of people who access healthcare and social infrastructure by taxi. There are a number of alternatives to travelling by taxi at night, including by private hire vehicle which are typically more active during the evening / overnight than taxis.

Protected characteristics

Protected characteristic groups include; age, disability, sex, race, pregnancy and maternity, gender reassignment, religion or belief, sexual orientation. By considering the impacts on these groups this also demonstrates that TfL has met a legal responsibility under the Public Sector Equality Duty (PSED).

If the fleet reduces in size, this could impact availability of taxis, which could have a negative impact on taxi users, including all protected characteristics groups. Some taxi drivers with protected characteristics will also be negatively affected. The following table provides some statistics and commentary about the potential level of impact on each group.

Protected characteristic	Impacts on passengers	Impacts on drivers
Age	The age group who use taxis the most is 30-54 year olds ⁵¹	25 per cent of drivers are 60 years+
Disability	Of Londoners who use taxis, around three per cent have a disability, 2.4 per cent use a wheelchair and 0.4 per cent have an assistance dog	No information
Sex	Londoners who use black cabs are predominately male (59 per cent in 2018) ⁵² but there could be a minor negative impact on female passengers travelling at night if the availability of taxis decreases, or wait times increase.	98 per cent male
Race	No information	66 per cent of drivers are white British
Gender reassignment	Some trans passengers have reported feeling less safe using public transport at night	No information
Pregnancy and maternity	No information	No information
Religion or belief	No information	No information
Sexual orientation	No information	No information

Table 15: Impacts on people with protected characteristics

Deprivation

Of taxi drivers registered in London 18 per cent live in the 20 per cent most deprived Lower Layer Super Output Area (LSOA)⁵³. If taxi drivers who live in deprived communities are affected then they may be more severely impacted and find it more difficult to adapt.

Stress

If drivers have to work longer hours to maintain a sufficient income then their stress or mental health may suffer, there is evidence that increased working hours can lead to mental ill health or stress⁵⁴. Concerns around maintaining the current level of income may also affect taxi fleet owners in terms of increased stress and mental health issues.

⁵¹ TPH user data

⁵² Taxi and Private Hire Driver Diary 2016/17, October 2017 report, Steer Davies Gleave)

⁵³ LSOA's are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales

⁵⁴ Health and Safety Laboratory (2003) 'Working long Hours'. (http://www.hse.gov.uk/research/hsL_pdf/2003/hsL03-02.pdf)

Proposal	Affected user	Scoped in / out	Description of the impacts	Scale and distribution of impact	Sensitivity of impact	Temporality of impact	Agreed impact rating
				(low, med, high)	(low, med, high)	(short, med, long)	(+3 to -3)
Health and equality							
Mandate maximum operating age	Taxi drivers	In	<p>This proposal is expected to have a negative impact on health and equality as a result of the economic impacts on older and disabled taxi drivers, although positive health benefits from air quality improvement would also benefit this group.</p> <ul style="list-style-type: none"> • Mandating the maximum operating age is expected to affect approximately 1,000 vehicles in 2019. • Disabled drivers sometimes have special adaptations to their vehicles which would make vehicles more expensive to replace (they would continue to qualify for the disabled vehicle adaptation exemption, but would need to delicense by the relevant maximum age limit) • The proposal will affect owner drivers, 25 per cent of all licensed taxi drivers are aged 60 years+. Some may also own an older taxi and may not be able to afford to purchase a new taxi or rent a taxi. • Older part-time drivers (who may be working to supplement a pension) may not be able to afford a new taxi or to rent a taxi. • The proposals could cause stress and anxiety as drivers may have to work longer hours to maintain a suitable income 	Med	High	Med	-2
	Taxi fleet owners	In	<p>This proposal is expected to have a negative impact on health and equality as a result of the economic impact on fleet owners causing stress and anxiety, although positive health benefits from air quality improvements would also benefit this group.</p> <ul style="list-style-type: none"> • The proposals could cause stress and anxiety due to the impact on fleet business models 	Low	High	Med	-2
	Taxi manufacturers	Out	<ul style="list-style-type: none"> • No impacts identified 				
	Taxi passengers	In	<p>This proposal could have a negative impact on taxi passengers if it results in a reduction in the overall fleet size, therefore causing an increase in wait times, although positive health benefits from air quality proposals would also benefit this group.</p> <ul style="list-style-type: none"> • There might be particular impacts on female and trans passengers travelling at night, or older or disabled passengers who rely on taxis for a door-to-door service. • Around 20 per cent of Londoners who use taxis report having a disability (TfL Taxi CSS 2018). If the fleet is reduced there might be a small reduction in accessibility • Around 18 per cent of Londoners who report using taxis are over 65 (TfL Taxi CSS 2018) • Passengers could benefit from using a cleaner and new fleet 	Low	Med	Med	-2
	Pedestrians and road users	Out	<p>Improvements in air quality will benefit all Londoners; these benefits have been scored under the environmental assessment.</p>				
	Other (residents and businesses)	In	<p>This proposal will have a small benefit on residents and businesses as a result of the reduction in NOx emissions associated with this proposal.</p> <ul style="list-style-type: none"> • Possible improvements in air quality will benefit all Londoners, and particularly deprived communities who are disproportionately impacted by poor air quality • A potential reduction in the fleet may have a positive impact on sustainable modes with people potentially choosing to travel by public transport, cycle or walk 	Low	Med	Med	+1
Phased age limit reduction	Taxi drivers	In	<p>This proposal is expected to have a negative impact on health and equality as a result of the economic impacts on older and disabled taxi drivers, although positive health benefits from air quality proposals would also benefit this group.</p> <ul style="list-style-type: none"> - The impact on the phased age limit reduction on vehicles is: <ul style="list-style-type: none"> - Approximately 3,800 vehicles lose one year of operation (Euro 3 standard vehicles) - Approximately 7,000 vehicles lose two or three years of operation (Euro 4 standard vehicles) - Approximately 4,600 vehicles lose three years of operation (Euro 5 standard vehicles) • Disabled drivers sometimes have special adaptations to their vehicles which would make vehicles more expensive to replace (they would continue to qualify for the disabled vehicle adaptation exemption, but would need to delicense by the relevant maximum age limit) 	High	High	Med	-3

			<ul style="list-style-type: none"> The proposal will affect owner drivers, 25 per cent of all licensed taxi drivers are aged 60 years+. Some may also own an older taxi and may not be able to afford to purchase a new taxi or rent a taxi. Older part-time drivers (who may be working to supplement a pension) may not be able to afford a new taxi or to rent a taxi. The proposals could cause stress and anxiety as drivers may have to work longer hours to maintain a suitable income 				
	Taxi fleet owners	In	<p>This proposal is expected to have a negative impact on health and equality as a result of the economic impact on fleet owners causing stress and anxiety, although positive health benefits from air quality proposals would also benefit this group.</p> <ul style="list-style-type: none"> The proposals could cause stress and anxiety due to the impact on fleet business models 	Med	High	Medium	-2
	Taxi manufacturers		<ul style="list-style-type: none"> No impacts identified. 				
	Taxi passengers	In	<p>This proposal could have a negative impact on taxi passengers if it results in a reduction in the overall fleet size, therefore causing an increase in wait times.</p> <ul style="list-style-type: none"> There might be particular impacts on female and trans passengers travelling at night, or older or disabled passengers who rely on taxis for a door-to-door service. Around 20 per cent of Londoners who use taxis report having a disability (TfL Taxi CSS 2018). If the fleet is reduced there might be a small reduction in accessibility Around 18 per cent of Londoners who report using taxis are over 65 (TfL Taxi CSS 2018) Passengers could benefit from using a cleaner and new fleet 	Med	Med	Med	-2
	Pedestrians and road users	Out	<ul style="list-style-type: none"> Improvements in air quality will benefit all Londoners; these benefits have been scored under the environmental assessment 				
	Other (residents and businesses)	In	<p>This proposal will have a small benefit on residents and businesses as a result of the reduction in NOx emissions associated with this proposal.</p> <ul style="list-style-type: none"> Possible improvements in air quality will benefit all Londoners, and particularly deprived communities who are disproportionately impacted by poor air quality A potential reduction in the fleet may have a positive impact on sustainable modes with people potentially choosing to travel by public transport, cycle or walk 	Low	Med	Med	+1
Remove the hardship exemption	Taxi drivers	In	<p>This proposal is expected to have a negative impact on drivers who may have benefited from an age limit extension based on personal hardship. This may have a disproportionate impact on older drivers, female drivers and others with protected characteristics. Approx. two per cent of taxi drivers are women (driver demographics) and over 25 per cent of drivers are over the age of 60. The number of drivers who were granted a hardship exemption in 2017 was approximately 70.</p>	Low	High	Med	-2
	Taxi fleet owners	Out	No impact as hardship exemption only available for drivers				
	Taxi manufacturers	Out	No impact as hardship exemption only available for drivers				
	Taxi passengers	Out	This proposal is unlikely to impact on taxi passengers as the number of exemptions granted is small and so there is not expected to be any impact in availability, wait times of taxi fares.				
	Pedestrians and road users	Out	No impact				
	Other (residents and businesses)	Out	No impact				
Remove the current alternative fuel conversion age limit	Taxi drivers	Out	Drivers who have already converted to LPG will keep their 5 year extension so this has been scoped out.				
	Taxi fleet owners	Out					
	Taxi manufacturers	Out					
	Taxi passengers	Out					
	Pedestrians and road users	Out					

	Other (residents and businesses)	Out		
Remove the historic and classic/niche vehicles age limit exemption	Taxi drivers	Out	The impact of this proposal has been scoped out as there are currently no taxis licensed which are eligible to receive the historic and classic/niche vehicle age limit exemption. No taxis licensed in the future would be eligible either.	
	Taxi fleet owners	Out		
	Taxi manufacturers	Out		
	Taxi passengers	Out		
	Pedestrians and road users	Out		
	Other (residents and businesses)	Out		

7.3 Economy

Individual livelihood

Drivers

Owners of Euro 2, 3, 4 and 5 taxis will all be affected, to differing extents, by the proposals to mandate the maximum operating age or the phased age limit proposals. This accounts for approximately 16,000 vehicles in the current fleet. The options for owner-drivers who are affected by proposals to mandate the maximum operating age and the phased age limit reductions are set out in table 16 below.

Option	Description	Impact
Sell / delicence and lease a replacement vehicle	For drivers who were intending to work the final years of their career in a vehicle that would be delicensed earlier, it would be possible to lease a replacement vehicle rather than purchasing a new one. 5,100 delicensing payments of £1k to £10k (first come first served)	This is an option for those who do not wish to purchase a new vehicle but wish to stay in the trade. Unlikely to be worthwhile for drivers who do low annual mileage.
Sell / delicence and leave trade	5,100 delicensing payments of £1k to £10k (first come first served)	TfL does not have access to information on driver income but the financial impact will depend on the amount of delicensing payment, or value of the vehicle.
Sell / delicence and buy a second hand vehicle (diesel)	5,100 delicensing payments of £1k to £10k (first come first served) Second hand vehicles readily available and low cost.	Dependent on delicensing payment received but higher payments could cover the cost of a replacement second hand vehicle for some drivers.
Convert Euro 5 taxis to LPG	1,000 LPG conversion grants of £5,000 are available to all Euro 5 taxis apart from Mercedes Vitos (32 per cent or 1,474 of Euro 5s are Vitos).	Vehicle owners will have to pay the additional cost, circa £7k to convert. Fuel savings of 20 per cent compared to diesel. Unlikely to be worthwhile for owners of older vehicles who do medium to low annual mileage. Drivers with high mileage or younger vehicles could benefit from significantly reduced running costs as well as a 15 year age limit.
Share a vehicle with someone else	Depends on specific arrangement but likely to be lower cost than leasing or purchasing a vehicle outright.	Reduced purchase / rental costs but also reduced availability so will only work for some drivers.
Sell/ delicence and purchase a new ZEC taxi	Some drivers may potentially consider purchasing a new ZEC taxi 5,100 delicensing payments of £1k to £10k (first come first served)	Grants to support drivers with purchasing ZEC taxis are available however, the cost may still be prohibitive for some drivers

Table 16: Options for taxi owner drivers and related impacts

The following table sets out the number of vehicles affected by the proposals to mandate the maximum operating age and the phased age limit reductions by Euro standard.

Euro standard	Numbers of vehicles affected and delicensing payments available	Impacts of proposals	
		Mandating maximum age	Phased age limit reductions
2 (aged 17+)	<ul style="list-style-type: none"> There are six Euro 2 vehicles in the fleet (as of Jan 2019), all are over the age of 15 and would not be affected by the 'mandating the maximum age limit' proposal if introduced in Nov 2019. These vehicles are not eligible for a delicensing payment. 	Vehicles unaffected as have already been licensed for the last time.	Not affected
3 (aged 12-16)	<ul style="list-style-type: none"> Euro 3 vehicles are amongst the oldest in the fleet and all 4,810 (in the fleet as of Jan 2019) are potentially impacted by the proposals to mandate the maximum operating age and the phased age limit reduction Euro 3 vehicles will lose a maximum of one year's operation as a result of the phased age limit reductions. 1,000 delicensing payments are available (from 14th Jan 2019) for vehicles between 13 and 15 years of age with 2,416 vehicles eligible to apply. 4,100 higher delicensing payment available for vehicles younger than 13 (1445 euro 3s are younger than 13). 	<p>1000+ vehicles affected in 2019, no delicensing payment available</p> <p>Vehicles aged 14 or older on 1st November 2019 would not be able to relicense.</p>	3,800 vehicles lose 1 year operation, 5,100 delicensing payments available for vehicles younger than 13 years and 1,000 delicensing payments available for vehicles between 13 and 15 years of age
4 (age 7-11)	<ul style="list-style-type: none"> 7,023 taxis (in the fleet as of Jan 2019) are potentially impacted by the phased age limit reduction. Depending on their age Euro 3 vehicles will lose either 2 or 3 years operation as a result of the phased age limit reductions. 4,100 higher delicensing payments are available for vehicles younger than 13 (all 7,023 euro 4s are younger than 13). 	None in 2019	7,023 vehicles lose 2 or 3 years operation, 5,100 delicensing payments available
5 (age 3-6)	<ul style="list-style-type: none"> 4,602 taxis (in the fleet as of Jan 2019) are potentially impacted by the phased age limit reduction. Vehicles will lose 3 years operation as a result of the phased age limit reductions, unless converted to LPG 4,100 higher delicensing payments are available for vehicles younger than 13 (all 4,602 euro 5s are younger than 13). 1000 LPG conversion grants of £5,000 available to Euro 5s (except Mercedes Vitos) 	None in 2019	4,602 vehicles lose 3 years operation, 5,100 delicensing payments available, no vehicles leave fleet until 2025 1000 LPG conversion grants of

			£5,000 available to Euro 5s (except Mercedes Vitos)
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Table 17: Impacts by euro standard (as of Jan 2019)

Fleet owners

There are a number of companies who own fleets of vehicles and generate income from operating in the taxi trade in the following ways:

- renting out vehicles to drivers
- advertising revenue
- repairs

Fleet owners who own Euro 2, 3, 4 or 5 vehicles will be impacted, to various degrees by these proposals. They will be able to apply for delicensing payments unless or until limited by the state aid 'de minimis' limit of €200,000. The estimated number of payments available is shown in table 18 (assuming fleets have not benefitted from other state aid). Companies are able to apply for delicensing payments at different rates so the number of payments received would depend on the total sum of all the payments.

Max payments to one company ⁵⁵	Payment	Total payments available
17	£10,000	1250
19	£9,000	1100
21	£8,000	850
24	£7,000	500
29	£6,000	400
174	£1,000	1000
34	£5,000	1000 payments for LPG conversion

Table 18: Maximum numbers of payments available up to state aid limit

Impact on London's Economy

As described in the previous section if the taxis which leave the fleet early as a result of the proposals are not replaced by younger vehicles then the overall size of the fleet will reduce. This will result in a small reduction in taxi availability which could impact aspects of London's economy which are more dependent on taxis. As shown in table 14 in the baseline chapter 22.9 per cent of taxi journeys are for entertainment, 23.7 per cent are to or from work and 22.5 per cent are business trips. Given the level of public transport accessibility in London, and particularly in central London, where a high proportion of taxi journeys either start or finish then a small reduction in the availability of taxis will not have a measurable impact on these sectors of the economy.

⁵⁵ Based on exchange rate of 0.87 euro to 1 pound

Proposal	Affected user	Scoped in/out	Description of the impacts	Scale and distribution of impact	Sensitivity of impact	Temporality of impact	Agreed impact rating
				(low, med, high)	(low, med, high)	(short, med, long)	(+3 to -3)
ECONOMY							
Mandate maximum operating age	Taxi drivers	In	This proposal is expected to have a negative impact on the Economy 'category of assessment' as a result of the economic impacts on taxi drivers. <ul style="list-style-type: none"> Mandating the maximum operating age is expected to affect more than 1,000 vehicles in 2019. The proposal will affect all licensed taxis and will require some taxi drivers who own their vehicles to delicense them earlier than anticipated. In the 2017/18 Taxi and Private Hire Licensee CSS 57 per cent of taxi drivers said that they owned and drove a taxi. 	Med	High	Med	-2
	Taxi fleet owners	In	This proposal is expected to have a negative impact on the Economy 'category of assessment' as a result of the economic impacts on taxi fleet owners. <ul style="list-style-type: none"> Fleet operators will not be able to licence and operate taxis for as long as they currently can. Will be a particular issue for taxi fleet owners who have a high proportion of older vehicles and would therefore need to invest in higher numbers of new or younger taxis. 	Med	Med	Med	-2
	Taxi manufacturers	In	This proposal is expected to have a positive impact economic impact on manufacturers as a result of the increase in demand for new ZEC taxis.	Low	Med	Med	1
	Taxi passengers	In	This proposal could have a small negative impact on passengers (if it results in an increase in wait times) who depend on taxis for accessing employment.	Low	Low	Med	-1
	Pedestrians and road users	Out	There is unlikely to be any economic impact on pedestrians and other road users as a result of this proposal.				
	Other (residents and businesses)	In	This proposal may result in a marginal negative impact on small businesses if the size of the taxi fleet reduces. It may also result in a small benefit to second hand dealers and scrappage companies.	Low	Low	Short	-1
Phased age limit reduction	Taxi drivers	In	This proposal is expected to have a negative impact on the Economy 'category of assessment' as a result of the economic impacts on taxi drivers. <ul style="list-style-type: none"> The impact on the phased age limit reduction on vehicles is: <ul style="list-style-type: none"> Approximately 3,800 vehicles lose one year of operation (Euro 3 standard vehicles) Approximately 7,000 vehicles lose two or three years of operation (Euro 4 standard vehicles) Approximately 4,600 vehicles lose three years of operation (Euro 5 standard vehicles) The proposal will affect all Euro 2, 3, 4 and 5 taxis and will require taxi drivers to replace their vehicle if they want to continue operating in London. In the 2017/18 Taxi and Private Hire Licensee CSS 57 per cent of taxi drivers said that they owned and drove a taxi. 	High	High	Long	-3
	Taxi fleet owners	In	This proposal is expected to have a negative impact on the Economy 'category of assessment' as a result of the economic impacts on taxi fleet owners. <ul style="list-style-type: none"> Some taxi fleet owners may have a high proportion of older vehicles and would therefore need to invest in higher numbers of younger / cleaner taxis. 	High	High	Long	-3
	Taxi manufacturers	In	This proposal is expected to have a positive impact economic impact on manufacturers as a result of the increase in demand for new ZEC taxis.	Med	Med	Long	2
	Taxi passengers	In	This proposal could have a small negative impact on passengers (if it results in an increase in wait times) who depend on taxis for accessing employment.	Low	Low	Med	-1
	Pedestrians and road users	In	There is unlikely to be any economic impact on pedestrians and other road users as a result of this proposal.				

	Other (residents and businesses)	In	This proposal may result in a marginal negative impact on small businesses if the size of the taxi fleet reduces. It may also result in a small benefit to second hand dealers and scrappage companies.	Low	Low	Short	-1
Remove the hardship exemption	Taxi drivers	In	This proposal is expected to have a negative impact on the E economy 'category of assessment' as a result of the impact on drivers under financial pressure who no longer able to claim a hardship exemption.	Low	Med	Med	-1
	Taxi fleet owners	Out	No impact				
	Taxi manufacturers	Out	No impact				
	Taxi passengers	Out	No impact				
	Pedestrians and road users	Out	No impact				
	Other (residents and businesses)	Out	No impact				
Remove the current alternative fuel conversion age limit	Taxi drivers	Out	Scoped out because the change does not apply to vehicles which have already applied				
	Taxi fleet owners	Out	Scoped out because the change does not apply to vehicles which have already applied				
	Taxi manufacturers	Out	No impact				
	Taxi passengers	Out	No impact				
	Pedestrians and road users	Out	No impact				
	Other (residents and businesses)	Out	No impact				
Remove the historic and classic/niche vehicles age limit exemption	Taxi drivers	Out	The economic impact on this proposal has been scoped out as there are currently no taxis licensed which are eligible to receive the historic and classic/niche vehicle age limit exemption. No taxis licensed in the future would be eligible either.				
	Taxi fleet owners	Out					
	Taxi manufacturers						
	Taxi passengers	Out					
	Pedestrians and road users	Out					
	Other (residents and businesses)	Out					

The below table outlines issues identified in the stakeholder workshops with taxi trade body representatives, fleet owners and manufacturers. Only issues which directly relate to the proposals being consulted on have been included. The issues raised have been considered in the assessment of impacts earlier in this chapter.

Issue identified	Theme
Lack of charging infrastructure available for taxis / inconvenient to charge during the day	Economy
Uncertainty from the proposals will lead to taxi drivers keeping older taxis for longer	Environment
Stress and anxiety caused by age limit proposals and uncertainty over payments available	Health and Equality / Environment
Older drivers who rent older cabs may not be able to afford to rent younger vehicles	Economy
Concerns over LPG refuelling capacity and location	Economy
Mercedes Vito Euro 5 cannot be converted to LPG	Economy
LPG grant not sufficient (Trade reps)	Economy
LPG grant right level (Manufacturers / converters)	Economy
Positive impact of lower running costs of LPGs and ZECs	Economy
Reduced second hand value of Euro 3, 4 and 5s as a result of the announcement	Economy
Negative impact on Euro 6 values as confidence in diesel undermined (Trade representatives)	Economy
Positive impact on Euro 6 values as higher age limit for Euro 6 stimulates market (Manufacturers and Proprietors)	Economy
Fleet business models based on 15 year life cycle, will cause some businesses to close	Economy
State aid limitations prevent fleets from being able to delicense more vehicles	Economy/ Environment
Negative impact on rental values and associated income e.g. advertising and credit card income	
Positive impact on manufacturers and associated industries of phased approach as this creates a sustainable renewal rate	Economy
Lack of choice of vehicle and cost area barrier to switching to ZEC	Economy
Will not encourage new applicants to become licensed taxi drivers	Health and Equality
Delicensing fund not sufficient. Payment levels attractive but not enough individual payments available, and a reduction from the previous delicensing fund of £42m.	Economy

Table 19: Issues identified through stakeholder workshops held in January 2019

8 Mitigation

Potential mitigation for issues identified are outlined below.

Issue	Potential mitigating measure	Pros	Cons	Recommendations for action
Lack of charging infrastructure available for taxis	TfL installing additional rapid charge points – there will be 300 by the end of 2020	Increases availability of infrastructure		Ensure sites for future rapid charge points serve the needs of the taxi trade
Uncertainty will lead to owners keeping vehicles for longer	Clearly communicate changes to trade, including phased nature giving confidence over future changes, as well as first come first served nature of delicensing scheme	Will enable taxi owners to make informed choices about when to change their vehicles		Develop clear communication and stakeholder engagement strategy if proposals are confirmed
No LPG conversion options for Euro 5 Mercedes Vitos	Alternative delicensing options for Mercedes Vitos	Provides an alternative payment for owners of these vehicles	Limited support for LPG conversion means that only 1000 Euro 5 taxis will be eligible for these grants. Additional payments are not proposed for other Euro 5 drivers who do not secure a conversion grant. These vehicles are eligible for the delicensing fund.	To consider alternative options for Mercedes Vito owners

Owner drivers of vehicles affected by the age limit who do not receive a delicensing payment	A compensation scheme for owner drivers	Provides a payment to drivers who are financially impacted by changes	Scale of compensation scheme would be unaffordable. Other businesses and individuals are affected by ULEZ, ULEZ expansion and changes to the CCZ. £42m has been made available to support drivers who delicense early	TfL/GLA have already extended and restructured the delicensing scheme so no further action recommended
Affordability gap from second hand vehicle to cost of ZEC taxi	a) Increase ZEC grant b) Reduce cost of ZEC taxi	A 'carrot' measure which may encourage greater uptake of ZEC taxis	Not possible to increase ZEC grant due to State Aid limitations. TfL/GLA do not have control over prices of ZEC taxis, nor availability of financing options	TfL/GLA to encourage more models to come into the market, to encourage LEVC to reduce the price premium, and to help identify financing options to reduce the cost of ZEC taxis
Women, disabled and trans passengers may find it slightly harder to use a taxi if the fleet size reduces	Ensure ranks and other options are readily available e.g. information on how to pre book a private hire vehicle	Impact on availability is likely to be low as the proposals are phased, and where it is impacted, other alternatives are available	Those reliant on wheelchair accessible vehicles may have reduced options	Taxis and wheelchair accessible PHVs are already exempt from the Congestion Charge and should be readily available. No further recommendation
Vehicles that will be 14 years old on 1 st November 2019 will no longer be able	Communicate to drivers of vehicles that are 14 or will be 14 by 1 st November to	Limits the impact on these drivers who will lose up to a year's operation through this	If action is taken, vehicles could still lose some expected operation, but all would be able to	Stakeholder communications setting out options for affected drivers

to re-licence beyond that point	let them know that they will need to re-licence their vehicles by 31 st October 2019 in order to operate beyond the vehicle's 15 th birthday under current rules.	change (i.e. operating beyond the 15 year age limit)	operate into their 16 th year, or choose to delicense.	
Fleet owners who have large numbers of older vehicles face a severe financial impact	Bulk payments for fleets who delicense large numbers of vehicles	Potential to remove a large number of highly polluting vehicles	Deliverable only up to State Aid limits	No recommendation

Table 20: Potential mitigation measures

TfL Taxi Age Limit Consultation: LTDA Alternative Proposal

1. Introduction

London's taxi trade is committed to reducing its contribution to NOx emissions and doing its bit to help clean up London's dirty air. We recognise the significant contribution of older, more polluting diesel taxis to emissions in London. Cabbies know all too well how important it is to tackle rising air pollution, with one of the worst places to breathe in this dirty air being stuck in traffic, behind the wheel of a cab.

The trade is proud to be leading the charge to a cleaner, greener London since LEVC's ZEC taxi hit the streets in early 2018. The new electric taxi is a game-changer for the trade. Over 1,400 TXe's are out on London's streets, and many more taxi drivers are keen to make the switch as soon as they can.

It was welcome that the Mayor and TfL reinstated £24 million to the taxi delicensing scheme earlier this year. These additional grants will be a great help to cabbies who want to invest in the exciting new technology and purchase a ZEC taxi.

However, the LTDA is concerned that TfL's proposals to reduce the maximum age limit for taxis will have a detrimental impact on the trade, as detailed in the LTDA's response to the proposals below.

The LTDA believes there is a workable alternative to TfL's current proposals which would deliver greater NOx emissions savings from black cabs and protect the future of London's historic taxi trade. We believe the alternative proposals set out below could be fully funded from the remaining funds available under the restructured taxi delicensing scheme, providing best value for public money.

2. Impact of TfL Proposals

The LTDA does not agree with TfL's proposals to reduce taxi NOx emissions through a phased reduction in the maximum taxi age limit for Euro III, IV and V vehicles to 12 years by 2022, and to mandate the maximum taxi operating age. We believe that it is not the most effective way to reduce the trade's contribution to NOx emissions in London, and that it will have a disproportionately negative impact on the trade and the livelihood of its drivers.

Since the proposals were announced last December, the trade has experienced a significant fall in the second-hand value of London taxis, at the expense of their owners. The pre-owned market has stagnated as potential buyers have hesitated from buying a cab that may lose its value if the proposals come into force. Under the current proposals, not only will taxi owner drivers see the equity in their existing vehicles fall dramatically, renter drivers will see their costs rise as the fleets shrink in size. The decline in value for older vehicles means that cabbies need to find even more money to buy a new ZEC or Euro VI taxi, increasing the barriers to upgrading cabs and keeping many people driving older vehicles.

Many cabbies have planned their future taxi investments based on the value of their existing taxi and its expected licensing expiration age of 15 years. In addition, many older members of the trade have planned their future working arrangements based on the licensing expiration date of their vehicle. Therefore, these proposals would throw many drivers' future financial security into question and threaten their livelihoods and plans for retirement.

The LTDA also does not agree with the proposals to remove the alternative fuel, historic and classic/niche, and hardship taxi age limit exemptions. Removing these exemptions would have a serious negative impact on the drivers of these cabs, who are often older members of the trade who do less mileage and do not serve central London, but still rely on the income received from the passenger journeys that they carry out. These drivers who work less contribute minimal amounts to the trade's emissions as a whole, and as a result removing these exemptions are unlikely to deliver a significant emissions reduction. However, it would have adverse impact on the livelihoods of these drivers; being a disproportional response to the issue at hand.

3. LTDA Alternative Proposal: Impact Assessment

The LTDA believes that by retrofitting all licensed Euro V diesel taxis in London to a certified Euro VI standard, more NOx emissions will be saved than if TfL reduces the taxi licence age limit from 15 to 12 years over a phased period between 2020 and 2022 (alongside mandating the maximum taxi operating age to the same as the relevant age limit from November 2019).

Under TfL's proposals, **8,030.04 g/km** of NOx will be saved between November 2019 and November 2022, as shown in **table 1** below.

Table 1

TFL Age Limit Proposal Impact Assessment				
Assessment Date	Number Of Cabs Impacted	EU Rating	NOx g/km	NOx Saving g/km
01.11.2019	924	III	1.26	1164.24
01.11.2020	1042	III	1.26	1312.92
01.11.2021	2805	III	1.26	3534.3
01.11.2022	1979	IV	1.02	2018.58
Total NOx g/km Saved				8030.04

The LTDA has carried out an impact assessment of the total NOx savings of retrofitting all Euro V diesel taxis licensed in London to a certified Euro VI standard, and retaining the existing taxi licence age limit at 15 years.

Table 2 below shows that **7,374.24 g/km** of NOx emissions would be saved by retrofitting 4,500 Euro V diesel taxis to a certified Euro VI standard (*nb.* including NOx savings from 924 Euro III taxis reaching the 15-year age limit in November this year). In addition, if the taxi

age limit was retained at 15 years, a further **4,847.22 g/km** of NOx emissions would also be saved as the oldest Euro III taxis reach the 15-year limit each year, shown in **table 3**.

Table 2

LTDA Euro V To Euro VI Conversion Impact Assessment				
Assessment Date	Number Of Cabs Impacted	EU Rating	NOx g/km	NOx Saving g/km
01.11.2019	924	EU III	1.26	1164.24
01.11.2020	1500	EU V	1.38	2070.00
01.11.2021	1500	EU V	1.38	2070.00
01.11.2022	1500	EU V	1.38	2070.00
Total NOx g/km Saved				7374.24

Table 3

Age Limit Staying At 15 Years (Older Cabs Natural Wastage) Impact Assessment				
Assessment Date	Number Of Cabs Impacted	EU Rating	NOx g/km	NOx Saving g/km
01.11.2020	1042	III	1.26	1312.92
01.11.2021	1393	III	1.26	1755.18
01.11.2022	1412	III	1.26	1779.12
Total NOx g/km Saved				4847.22

Therefore, under the LTDA's proposals the total NOx saved by 2022 from converting 4,500 Euro V diesel taxis to a certified Euro VI standard (7,374.24 g/km) and from the natural expiration of the oldest cabs at 15 years (4,847.22 g/km), would be **12,221.45 g/km**.

This demonstrates an additional **4,191.42 g/km** NOx saving by November 2022 compared with TfL's current proposals (8,030.04 g/km), as shown in **table 4**, a 52% increase.

Table 4

LTDA vs TfL Proposal Comparison			
	NOx g/km Saved: EU IV to V Conversion	NOx g/km Saved: 15-year Natural Wastage	Total
LTDA Total	7374.24	4847.22	12221.46
TfL Total			8030.04
Additional NOx g/km saved over TFL proposal			4191.42

While the oldest Euro III and Euro IV taxis will remain in the fleet for a short time under the LTDA's proposals, these vehicles are mostly driven by members of the trade who are using them less than newer drivers. In addition, almost all remaining Euro III taxis (bar 80) would be scrapped by 2022 even if the age limit remains at 15 years. Our full impact assessment shows that retrofitting 4,500 Euro V taxis – being the most heavily utilised vehicles in London – would deliver much more significant NOx savings, even if the older Euro III and IV taxis remain within the fleet until they reach the 15-year age limit.

4. Costs

The LTDA has sourced a SCRT retrofit system from HJS Emission Technology – Europe's largest manufacturer of retrofit systems for buses and light commercial vehicles. This system can convert both TX4 and the Mercedes-Benz Vito taxi from Euro V to meet a certified Euro VI standard.

The cost of converting each taxi is estimated at £4000 and therefore converting 4,500 would cost a total of £18 million, out of the total taxi clean air budget of £42 million.

The LTDA is convinced its proposals would be the best use of these funds and utilising the money in this way would significantly help the taxi trade reduce its contribution to pollution levels much earlier than under TfL's age limit reduction proposal. The additional benefit of retaining residual values in existing vehicles would enable more owners to upgrade to ZEC vehicles in the short to medium term and result in a fully ZEC fleet much earlier than would otherwise be the case.

The LTDA would be more than happy to discuss these proposals in further detail with representatives from the Mayor's office and TfL. Please do not hesitate to get in contact with ltda@newingtoncomms.co.uk should a meeting be of interest.

Analysis of LTDA Euro 6 retrofit proposal

In the LTDA consultation response, an alternative proposal to reduce NOx emissions from taxis was put forward. In summary the LTDA proposal includes:

- Mandating 15 year expiry on 1 November 2019 (as set out in our consultation proposals)
- Retaining a 15 year age limit for all taxis
- Mandating retrofit of all Euro 5 taxis to Euro 6 standards (TfL funded from the £42m taxi delicensing fund)

The LTDA calculated what a TfL funded, mandated Euro 5 to Euro 6 conversion with a rolling programme of conversions over three years would deliver, and suggested that it would deliver greater NOx reductions, and more quickly than the age limit proposals.

We have modelled the proposals on a like for like basis with proposals to reduce taxi age limits for Euro 3, 4 and 5 taxis to 12 years by 2022. The results of the modelling show that a Euro 6 retrofit programme does not achieve greater NOx savings than age limit proposals, and in fact misses the 2025 target reductions by 10 per cent.

We have also modelled what a Euro 5 to Euro 6 conversion could achieve if it were to deliver 0.5g/km of NOx (as estimated by the conversion company), and a slightly higher emissions output of 0.8g/km of NOx.

Differences in methodology

LTDA methodology for calculating overall emissions savings was to create a NOx g/km and apply it to every Euro 5 vehicle.

TfL methodology accounts for mileage and location of different types of taxis. The LTDA methodology does not.

LTDA's initial modelling had not accounted for any emissions from converted taxis. That is to say it assumed that 100 per cent of the NOx emissions from converted taxis were removed. In reality, standard Euro 6 taxis emit around 20 per cent less NOx than a Euro 5 taxi (COPERT 5¹). The LTDA modelling therefore significantly overestimated the scale of NOx reduction by effectively assuming that the converted taxis did not emit any NOx.

Further analysis provided by the LTDA showed what a 0.5g/km conversion may be able to deliver based on their methodology. We have also modelled this on a like for like basis with age limit proposals, as set out below.

For all modelled scenarios, we have included the savings expected from mandating 15 year expiry in 2019 (14 per cent reduction) and the impact of applications to the delicensing fund to date (11 per cent reduction).

Differences in Euro 6 emissions assumptions

We have modelled the Euro 5 to 6 retrofit proposal based on established Euro 6 emissions factors. In the absence of any other reliable evidence, it would not be appropriate to do otherwise.

¹ COPERT is the EU standard vehicle emissions calculator. It uses vehicle population, mileage, speed and other data such as ambient temperature and calculates emissions and energy consumption for a specific country or region.

The LTDA thinks this approach may underestimate the performance of the retrofit solution as the conversion company has indicated that the emissions performance of retrofitted vehicles could be better than the established Euro 6 emissions factors which are based on COPERT and used by Defra. It is important to note that the COPERT data is based on the actual performance of vehicles on the road, and not on a type approval duty cycle, which is often a poor guide to actual emissions.

Work is underway to retrofit a test taxi to Euro 6 standard. However, at this stage the retrofit is unproven and the level of reduction in emissions it may achieve in real-world London driving conditions is unknown. Without evidence to the contrary, we have adopted the assumption that Euro 6 compliance will be achieved to the levels indicated by the COPERT emissions factors, but not more than that. This is the only prudent approach until test results from type approval duty cycles and real-world taxi operations are available and approved by TfL.

The LTDA has made comparisons with the TfL approved Euro VI bus retrofit, which performs significantly better than a converted Euro 6 taxi as modelled. EU law uses Arabic numerals (e.g. Euro 6) to describe type approval conducted to light duty vehicle standards. Roman numerals (e.g. Euro VI) are used to describe a heavy vehicle type approval. The approval process for vehicle emissions is quite different in each case.

For a light duty vehicle, which includes passenger vehicles with fewer than 9 seats including the driver, or goods vehicles with a gross vehicle weight not exceeding 3500kg, the vehicle is tested on a chassis dynamometer in an emissions laboratory, using the World Light-duty Test Cycle (WLTC). This is the type 1 test under type-approval procedures. The appropriate emissions limits for the class of vehicle are applied. That constitutes a Euro 6c approval. More recent approval tests, if successful in the laboratory, are subjected to on-road verification testing, known as Real Driving Emissions (RDE). (This is mandatory on new approvals from Sept 2019). For RDE tests there are conformity factors applied which allow for variation in road/climatic conditions and also variance between laboratory and portable emissions analysers. These conformity factors are multiplication factors applied to the on-road measured emissions. The factor is 2.1 for Euro 6d-temp and 1.5 for Euro 6d.

Heavy duty vehicle emissions type approval is carried out on an engine only basis, using an engine dynamometer (a bench test). The engine is tested according to the World harmonised Stationary Cycle (a range of fixed rpm and load settings) and the World Harmonised Transient Cycle (a pattern of varying rpm and load settings). The appropriate emissions limits are applied. The engine is also tested for 'off-cycle emissions' using a number of randomly selected speed/load settings. If successful, this is followed by 'on-road verification' where the engine is installed into a vehicle chassis and road tested using portable measurement equipment and a payload of 50-60%.

The heavy duty approval requirement to perform on-road verification has led to tightly controlled emissions at Euro VI since the standard became mandatory in January 2014. This has demanded very careful calibration of engines and after treatment systems to control emissions. Whereas light duty approvals to Euro 6d-temp or 6d standard with RDE included, have only been phased in since 2017 and are not yet fully implemented for all light vehicle types (notably N1 light commercial vehicles), creating a lag in achieving such accurate emissions control. Because the approval test methodology is so different, it is not safe to assume that a percentage emissions reduction seen on one vehicle type (heavy duty) will also apply to another type (light duty). For Euro VI/6 diesel engines, the most common after treatment system is selective catalytic reduction (SCR), which is very dependent on the temperature of the exhaust catalyst to operate efficiently. The temperature is influenced by vehicle specification, operating conditions and 'payload'. This means that appropriate

emissions and durability testing over representative drive cycles is vital to ascertain the overall emissions reductions.

Extensive work was done over a number of years on optimising TfL bus retrofits to ensure that they work for a large proportion of the cycle and therefore achieve 90 per cent or greater NO_x reduction over the duty cycle. A critical factor is whether a high exhaust temperature can be maintained throughout the duty cycle, to ensure that the selective catalytic reduction (SCR) system is most effective. Whether a taxi retrofit will be equally capable of maintaining a high NO_x conversion rate is as yet unproven.

In common with the bus retrofit systems, it will be necessary for the retrofit manufacturer to demonstrate to the satisfaction of TfL that the system is protected against neglect or abuse, possibly through requirements for on-board in operation telemetry (as with the buses) or other monitoring of in service performance. One particular issue is that SCR retrofits require the use of a consumable fluid, AdBlue. Use of emulators to avoid AdBlue usage is a small, but recognised (by DVSA and traffic commissioners) issue amongst a minority of heavy vehicle operators and TfL will need to ensure that retrofit systems for taxis remain fully efficient in-service.

The approach to modelling bus and taxi emissions is entirely consistent – both sets of emissions calculations are based on COPERT emissions factors, in line with best practice. COPERT emissions factors for buses reflect the fact that there is a very established programme of monitoring bus emissions and performance across different Euro standards, in addition to performance of approved retrofit solutions. The lack of any appropriate testing and approval of a Euro 5 taxi retrofit means it is not appropriate for TfL to assume the same level of reduction is practically achievable, particularly given the importance of achieving our adopted targets for emissions reductions and air quality improvements in London, as set out in Defra's Air Quality Action Plan.

How the proposals perform

The results of the air quality modelling for the LTDA proposal are summarised in Figure 1 below, followed by the results of the air quality modelling for the phased age limit proposals (Figure 2) and then a comparison of the options over time, against our targets (Figure 3).

We have also included below analysis of Euro 5 to Euro 6 conversion which could produce 0.5g NO_x per km on a three year rolling programme, in line with the estimates put forward by the conversion company (Figure 4).

It should be noted that the emissions savings shown in Figures 1, 4 and 5 assume continued uptake of delicensing. In reality, however, this would not be possible if the money is diverted towards a retrofit scheme. The figures therefore present an optimistic scenario for emissions savings based on the proposals.

Figure 1. LTDA Mandatory Euro 5 to Euro 6 conversion

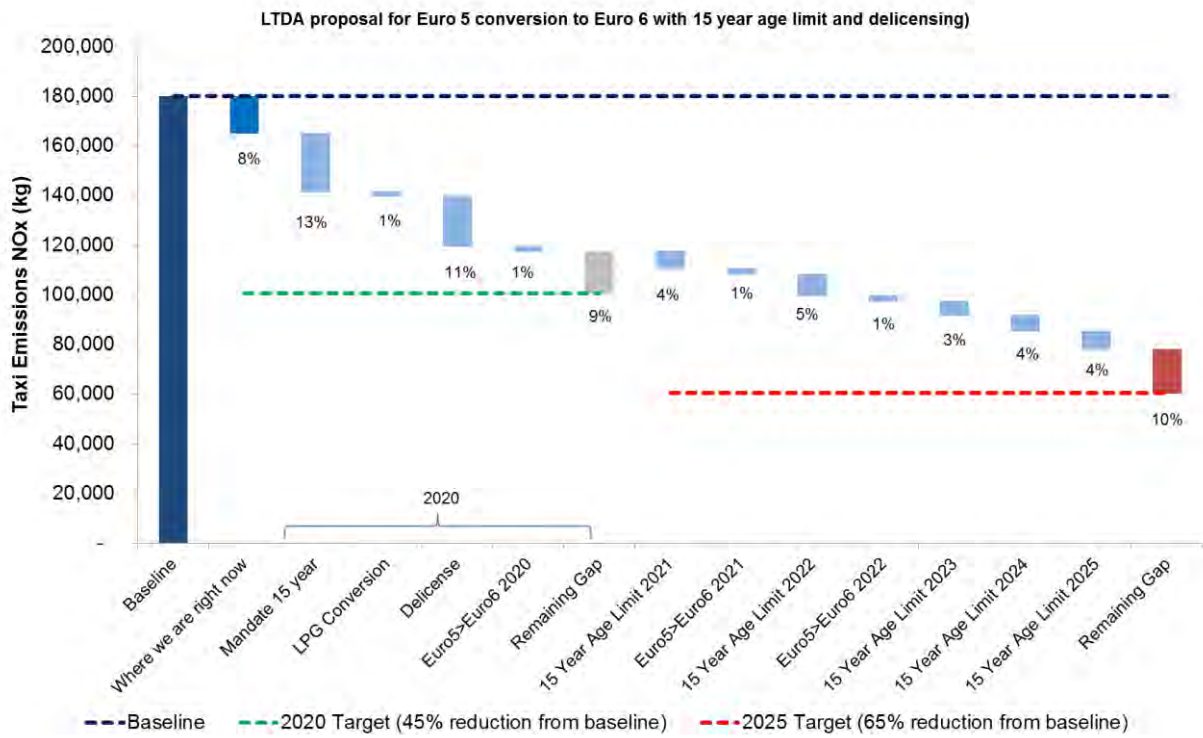


Figure 2. TfL phased age limit proposals

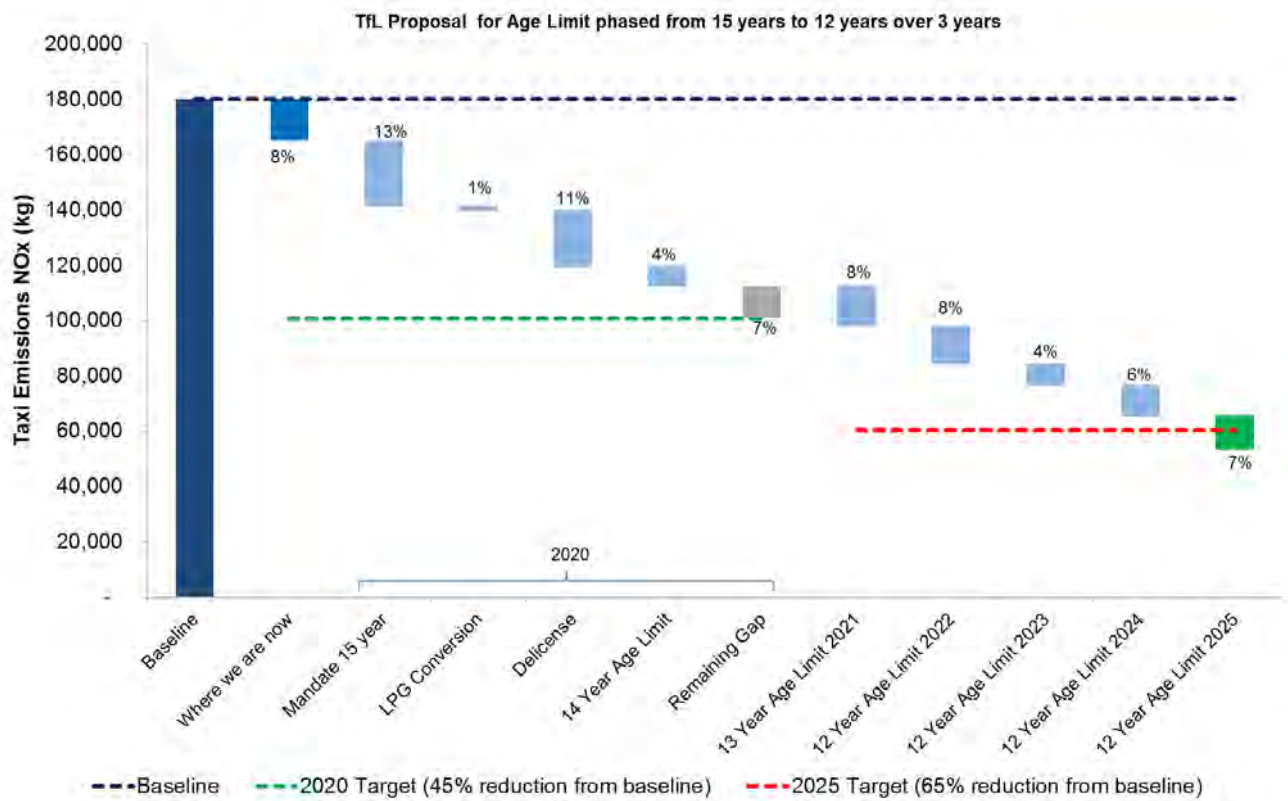


Figure 3. How the options compare against each other

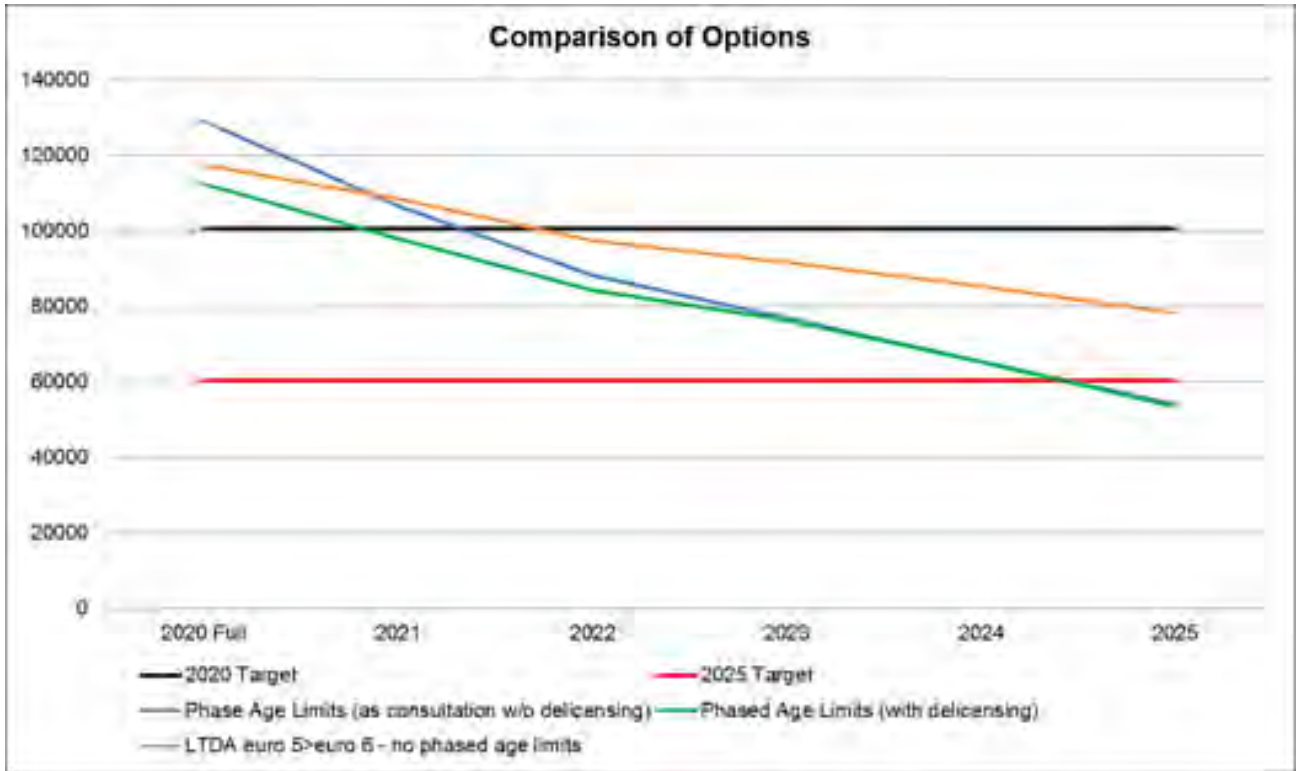


Figure 4. LTDA Mandatory Euro 5 to Euro 6 conversion based on NOx emissions of 0.5g/km

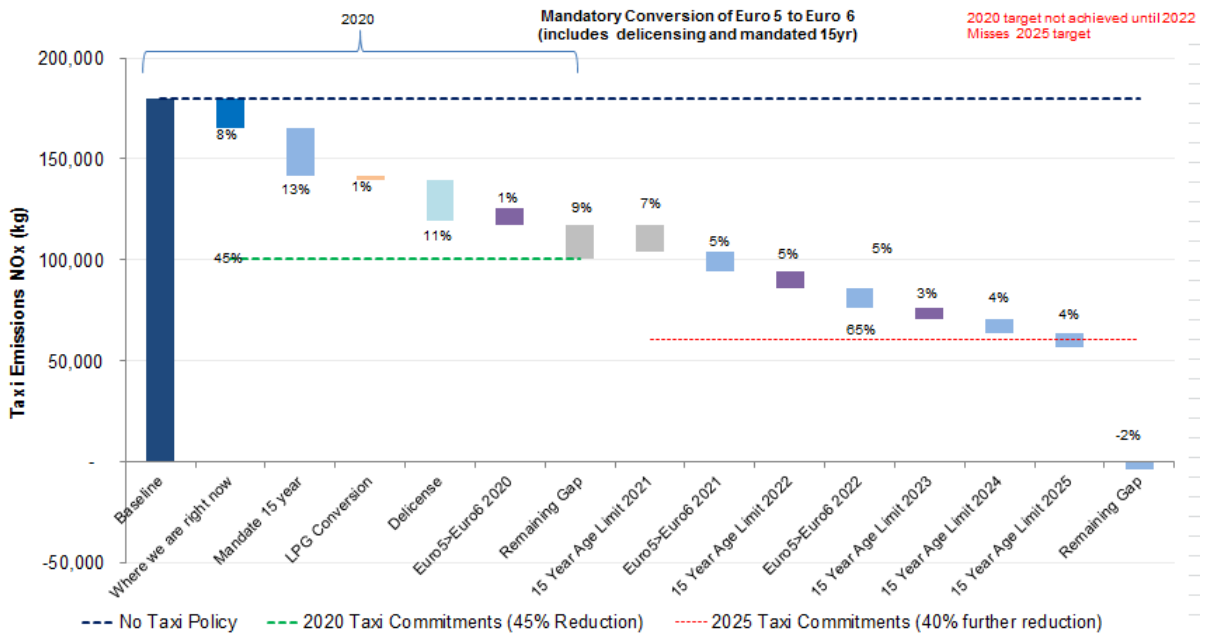
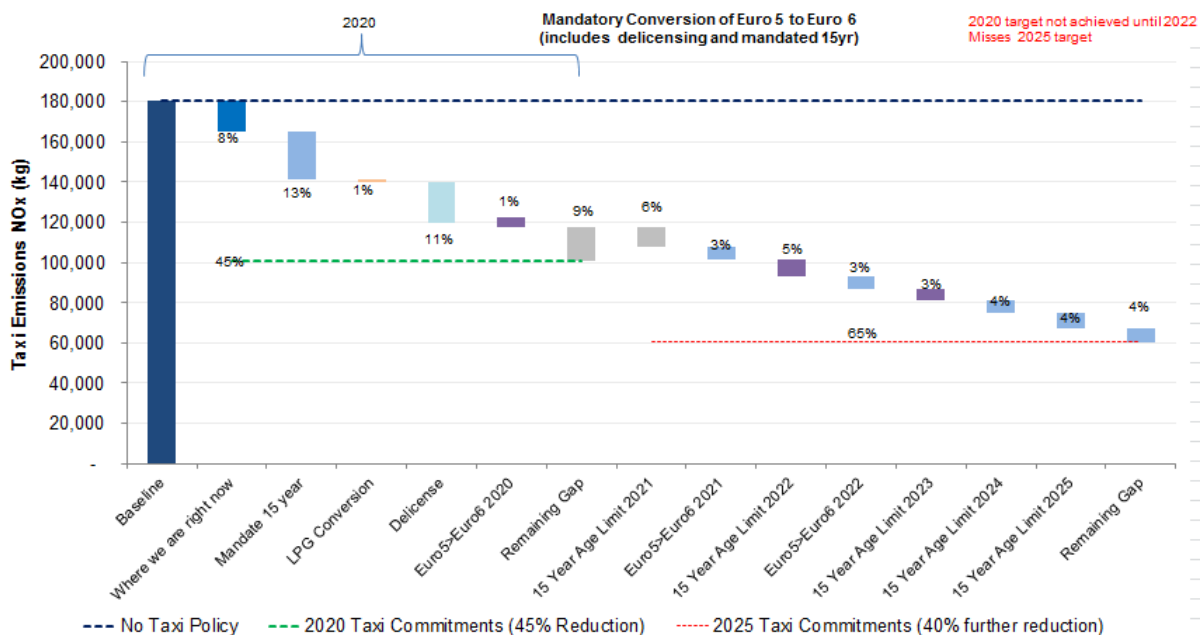


Figure 4 shows that if all Euro 5 taxis were to be retrofitted to this standard over three years starting in 2020 (assuming the approval process is complete in 12 months) the 65 per cent reduction in emissions required by 2025 would be met.

However in our experience selective catalytic reduction (SCR) retrofit solutions can struggle to maintain the same level of NO_x conversion efficiency in real world conditions compared with laboratory testing.

To consider what might be achieved with a slightly higher level of NO_x emissions, we have also tested a scenario where the retrofit delivered NO_x emissions of 0.8g/km. In this scenario, based on the same conversion rate as described above, it would only deliver a 61 per cent reduction in NO_x emissions by 2025, therefore missing the legal requirement by four per cent as shown in Figure 5 below.

Figure 5. Mandatory Euro 5 to Euro 6 conversion based on NO_x emissions of 0.8g/km



This analysis has shown that if the performance of the retrofit drops, or does not meet the 0.5 g/km NO_x, there is a risk that the 2025 target would not be met.

Feasibility / delivery and timescale

We are required by law to achieve legal air quality limit values and whilst seeking to achieve these we must reduce exposure to pollutants as quickly as possible, and with the greatest degree of certainty.

There is no approved diesel retrofit currently available, therefore no certainty that the scheme could be delivered as set out.

It is expected that it would take approximately 12 months for a retrofit solution to be approved, nationally accredited (EST CVRAS is specified by TPH) and conversion centres set up and running and ready to convert vehicles at scale. The process is summarised below (this should not be considered exhaustive, but provides an overview of a number of key steps):

- Application made to TfL’s Taxi and Private Hire Vehicle Policy Manager

- Proposed alternative system installed, photographed and supplied to TfL
- Inspection by TfL prior to legislative emissions testing to ensure the product is fitted according to application
- Legislative emissions testing cycle to determine emissions reduced to Euro 6d standard, utilising the WLTC test cycle. The class of cycle is the N1 class 3b test.
- Durability trial of equipment and system, including a minimum distance of 10,000 miles. During this trial the taxi is not permitted to operate as a taxi or to carry fare paying passengers. Weekly reports submitted to TfL based on real time data provided by remote tracking technology. TfL inspection at mid and end point of 10,000 mile trial
- Report submitted to TfL following durability trial
- Final series of legislative emissions testing
- Manufacturer also to achieve CVRAS (Cleaner Vehicle Accreditation Scheme) accreditation

In addition to testing timescales, if approved, a change as significant as mandating the conversion of all Euro 5 taxis would require another public consultation, extending timescales for delivery.

Funding

The LTDA proposed that the Euro 5 retrofit programme could be funded from the taxi delicensing scheme. There are not sufficient funds available for this. The number of applications received means that the majority of this fund is already accounted for. The proposal, which would cost in the region of £18m is therefore unfunded. If the taxi delicensing scheme were to be abandoned and the funds diverted to the LTDA retrofit proposal, this would potentially be unfair to those that had already applied for delicensing and would (at least) require a further consultation. Further, the benefits from the delicensing scheme in terms of emissions are expected to be very significant. Those benefits from the delicensing scheme would be lost if the same funds were repurposed towards Euro 5 retrofits.

Summary of findings

Following the very useful discussion on 22 May and subsequent emails and analysis provided, we have had further opportunity to consider the potential of the LTDA alternative proposal.

Unfortunately, after careful consideration, it is not considered that the LTDA proposal presents a viable alternative to reaching the target for reducing taxi NO_x emissions by 2025 for the following reasons:

- **Air quality:** As can be seen in Figure 3 above, modelling indicates that we would not meet the 2025 target under these proposals and Euro 6 conversion for Euro 5 taxis would not deliver the same level of air quality benefits as the age limit proposals. On a like for like comparison, the LTDA proposal delivers less benefit, with less certainty and misses the 2025 NO_x reduction target.
- **Certainty:** The age limit proposals provide certainty about the level of emissions savings that can be achieved, as shown in Figure 2. The Euro 5 to Euro 6 conversion options, even when modelled on the basis of NO_x emissions significantly lower than Euro 6 COPERT emissions factors (0.5g/km and 0.8g/km) do not, in any event, achieve greater results than the age limit proposals.

- **Feasibility, delivery and timescale:** In the absence of an approved retrofit, and the amount of time it would take to establish what level of benefit an approved conversion could achieve, it is not feasible to consider this to be an implementable alternative given the urgent need for action.

In addition, taxis which have been converted to run on Liquid Petroleum Gas (LPG) emit lower levels of NO_x than a Euro 6 taxi. Any funding available for taxi conversions would therefore be better channelled towards LPG than diesel conversions. To this end, provision has been made to support LPG conversions in the enhanced delicensing scheme. Under the LTDA proposals, diesel taxis would remain in the fleet for longer, emitting NO_x at higher levels than LPG or ZEC taxis. Our ambition remains to transition to a fully electric taxi fleet as quickly as possible to maximise emissions savings.

Rt Hon Sadiq Khan
Mayor of London
City Hall
The Queen's Walk
London
SE1 2AA



12 June 2019

Dear Sadiq,

I understand that you are shortly to make a final decision on reducing the age limit of London black cabs and write to express the gravest concern on this matter of behalf of the LTDA's 11,000 members across London and the trade as a whole.

Since your initial announcement, we have had significant concerns around the consultation process. We have reason to believe that senior staff at Transport for London have pre-judged the results of the consultation on this proposal and were briefing that twelve years would be the revised time limit to the private hire trade in December 2019. I also understand that TfL / City Hall staff have actively encouraged individuals and organisations to respond to the consultation in support of your plans when it became clear that the majority of respondents opposed it. We have no confidence that the consultation was conducted in a fair and open manner and believe that it was a tick-box exercise designed to allow you to push forward with your proposals without real consideration of the impact on the trade, or even the effectiveness of alternative proposals to reduce emissions.

As you know, the LTDA has proposed an alternative solution, which would deliver emissions savings and better value for London taxpayers without disproportionately penalising the cab trade. The solution that we propose utilises identical retrofitting technology to that supported and funded by Transport for London when applied to buses. The suppliers of this technology have indicated to us that the emissions reductions deliverable in practice on London roads through using this technology will be significantly greater than the figures used by TfL in assessing this.

In 2015, we predicted that it would be possible to have 9,000 zero-emission-capable (ZEC) cabs on London roads by the end of 2020, and you adopted this as a target. This prediction was based on information at the time that the LEVC-built vehicle would be available eighteen months earlier than it actually came to market, that it would be around £10,000 cheaper than its eventual market price, and that there would be a choice of ZEC vehicles available from different manufacturers making it easier for more cabbies to switch.

Despite these significant hurdles, the cab trade has made strong progress in working towards your target, with nearly 1,800 ZEC vehicles currently operating. We expect to reach 2,000 vehicles by the end of August and 2,600 by the end of 2019. With increased vehicle availability, it is feasible to deliver between 5,500 and 6,000 ZEC taxis on our streets by the end of 2020.

Your proposal to reduce the taxi age limit will seriously jeopardise this progress. In the months following your consultation announcement, sales of ZEC cabs plummeted, as drivers' loss of confidence crashed the second-hand vehicle market, with a collapse in residual values of older vehicles wiping out tens of millions in equity. This is making it even harder for cabbies to afford new ZEC cabs. Sales have only recovered over the past two to three months, driven precisely by the cab trade's support for the LTDA's alternative proposals. If you choose to ignore our proposals and continue with your plans to penalise the cab trade, it will become harder and harder to encourage drivers who have no confidence in your vision for the future of the trade to invest in clean vehicles.

London's iconic cab trade is in a precarious position, but we remain the only 100% accessible form of public transport in the capital. It is not an exaggeration to suggest that your plans to reduce the taxi age limits could wipe out the trade over the next ten years, putting thousands of self-employed Londoners out of work and making it harder for businesses and individuals to move around the city.

My members drive on London roads every day, breathing in polluted air. I regularly engage with organisations and campaign groups on air quality. We understand more than anyone the need to reduce emissions and are committed to doing our part to improve London's air quality. Your out-of-the-blue decision to penalise the trade, without putting in place any support to help us switch, is not the way to go about this.

In the strongest terms, I urge you to reconsider and meet with me as soon as possible to discuss how together we can meet your objectives of reducing vehicle emissions and safeguard the future of the taxi trade.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Steve McNamara', with a stylized flourish above the name.

Steve McNamara

General Secretary, The Licensed Taxi Drivers' Association (LTDA)

MAYOR OF LONDON

Steve McNamara
General Secretary
Licensed Taxi Drivers' Association (LTDA)
steve@ltda.co.uk

Our Ref: MGLA120619-4845

Date: 01 JUL 2019

Dear Steve,

Thank you for your letter of 12 June and support in finding ways to reduce taxi emissions. Thank you too for your questions at the State of London Debate on the same subject.

It is fantastic to see so many Zero Emission Capable (ZEC) taxis on our streets, helping to improve air quality and transition the London taxi fleet to be the greenest in the world. Unfortunately, though, emissions from taxis are still significant, contributing 25 percent of NOx road transport emissions in central London. From 2019, taxis will be the largest single source of road transport NOx in central London. Indeed, given improvements across the rest of the vehicle fleet in London, we estimate that the true contribution of taxis to NOx in central London is around 30 per cent.

London has already been in breach of the EU limit values for nitrogen dioxide for many years. The Government's Air Quality Plan (2017) on tackling roadside nitrogen dioxide emissions sets out how London will achieve limit value compliance by 2025. That Plan modelled and included a number of measures to reduce NOx emissions in London generally (such as the Ultra Low Emission Zone); it included 9,000 zero-emission capable ZEC taxis by 2020. If we are to meet EU legal limit values in accordance with the 2017 Plan, we must reduce NOx emissions from taxis by 65 per cent by 2025. As you say in your letter, there was a target of 9,000 ZEC taxis by 2020, which alongside delicensing was expected to achieve a 45 per cent reduction by 2020. However, it is now clear that we are not on track to deliver the emissions savings we need.

Transport for London (TfL) has considered a range of options to reduce taxi emissions, and recently consulted on proposals including a phased reduction of the taxi age limit for Euro 3, 4 and 5 taxis to 12 years by 2022. They are now considering responses to the consultation and will be making their decision shortly.

I am aware that as part of the consultation the LTDA submitted an alternative proposal to reduce taxi emissions by retrofitting Euro 5 taxis to Euro 6 standards. TfL is considering your proposal, including modelling the air quality impacts, and will respond to you directly with the results. I welcome and appreciate the effort you are putting into addressing this complex issue, and TfL will continue to work with you as you progress through the development and testing of a retrofitted taxi. The Commissioner has also expressed his interest in attending and observing vehicle testing once you are at that stage.

MAYOR OF LONDON

In your letter, you raise some concerns about the consultation process. The 10 week public consultation was informed by an Integrated Impact Assessment and open to anyone to respond. It was advertised via the press, social media, taxi trade material and emails to the taxi trade. TfL emailed members of the taxi trade and stakeholder groups including London Local Authorities; Business Improvement Districts; MPs and Assembly Members; Health Trusts; transport operators/groups; disabled persons representative groups; charities; UK vehicle manufacturers; and others, inviting them to respond to the consultation.

In reference to the conversations between TfL staff and the PHV trade in December 2018 that you mention, I believe this refers to a series of phone calls made to both taxi and PHV trade representative organisations, including the LTDA, on the morning of 19 December. This was to brief members of both trades on the contents of a press release, which contained details of the decision to remove the PHV exemption to the Congestion Charge and the decision to consult on proposals to reduce the taxi age limit to 12 years. All calls referred to these changes and explained that there were implications for both the taxi and PHV trades.

As you know, at the same time, TfL restructured and enhanced the taxi delicensing scheme to make it more attractive to taxi drivers, with payments of up to £10,000, double that of the previous top payment of £5,000. I was pleased to hear your feedback that the scheme was popular and was pleased to be able to provide a further £24m, bringing the total fund available to support taxi drivers choosing to delicense their older, more polluting taxis early to £42m. I am sure you will agree that this is a substantial investment of public funds to help the taxi trade transition to cleaner vehicles.

Once again, I would like to thank you for your support and recognition that we need to reduce taxi emissions to help clean up London's air. I understand that following commitments made at the recent State of London Debate, Heidi Alexander has already been in touch with you to find a mutually convenient time for the two of you to meet to discuss the consultation proposals, including your alternative approach.

Yours sincerely,



Sadiq Khan
Mayor of London

APPENDIX I: PROPOSED AMENDED TAXI CONDITIONS OF FITNESS

PART 2

CONDITIONS OF FITNESS

The Conditions of Fitness in Part 2 are operative from 1 January 2007. Vehicles type approved before this date remain subject to the conditions in force at the time of approval except that the conditions in paragraphs 5.3 to 5.5 (maximum age limits), 15.1 and 15.2 (facilities for disabled passengers) apply to all licensed vehicles.

5 General construction and maximum vehicle age limits

- 5.1 Every new type of taxi must comply in all respects with the requirements of the Motor Vehicle (Type Approval) Regulations 1980, the Motor Vehicle (Type Approval) Regulations (Great Britain) 1984, the Motor Vehicles (EC Type Approval) Regulations 1998 and with any further national or international legislation as may be applicable. They must also comply in use with the Road Vehicles (Construction and Use) Regulations 1986 (C & U). Every new type of taxi offered for approval must comply in all respects with British and European vehicle regulations and be “type approved” to the requirements of the M1 category of European Whole Type Approval Directive 2007/46/EC as amended. Those taxis which have not been “type approved” to the M1 category (e.g. conversions) must be presented with approved certification that the specific vehicle meets the requirements of that category.
- 5.2 Taxis offered for type approval must be so constructed as to facilitate the carriage of disabled persons and must be capable as a minimum of accommodating a disabled person in a DfT reference wheelchair in the passenger compartment.

~~5A From 1st January 2012, no licence will be issued to a vehicle over 15 years of age as calculated from the date on which the vehicle was first registered under the Vehicle and Excise Registration Act 1994~~

Maximum age of vehicles

5.3 From 1 November 2019 no taxi will be licensed to operate over its maximum relevant age limit (as set out in paragraphs 5.4 and 5.5 below).

NOTE: All licences issued must be for one year. A licence will not be issued where a vehicle will reach the maximum age limit in the subsequent 12 month period calculated from the date of inspection.

5.4 Subject to paragraph 5.5 below, from 1 November 2019 to 1 November 2022 the maximum age limit of Euro 3, 4 and 5 diesel taxis will reduce by one year each year, as calculated from the date on which the vehicle was first registered under the Vehicle and Excise Registration Act 1994.

The maximum age limits for Euro 3, 4 and 5 diesel taxis are shown below:

APPENDIX I: PROPOSED AMENDED TAXI CONDITIONS OF FITNESS

<u><i>Date effective</i></u>	<u><i>Maximum age limit for Euro 3, 4 and 5 diesel taxis</i></u>
<u>From 1 November 2019</u>	<u>15 years</u>
<u>From 1 November 2020</u>	<u>14 years</u>
<u>From 1 November 2021</u>	<u>13 years</u>
<u>From 1 November 2022</u>	<u>12 years</u>

5.5

From 1 November 2019 the maximum age limit will be 15 years for the following vehicles, as calculated from the date on which the vehicle was first registered under the Vehicle and Excise Registration Act 1994:

- diesel taxis which meet the Euro 6 standard for emissions;
- taxis which have been converted to run on Liquid Petroleum Gas (LPG) after 31 October 2019 and which meet the Euro 6 standard for emissions; and
- taxis which meet the zero emission capable (ZEC) taxi requirements (see paragraph 13.2 below).

Modifications/Additional Equipment

- 5.6 No equipment and/or fittings, other than those approved, may be attached to, or carried on the inside or outside of, the vehicle.
- 5.7 No modification may be carried out to a taxi without prior approval from LTPH. Before considering any unapproved modification to a taxi, approval must be sought from LTPH.
- 5.8 Guidance for in-cab modifications such as surveillance systems, etc. may be obtained from LTPH.

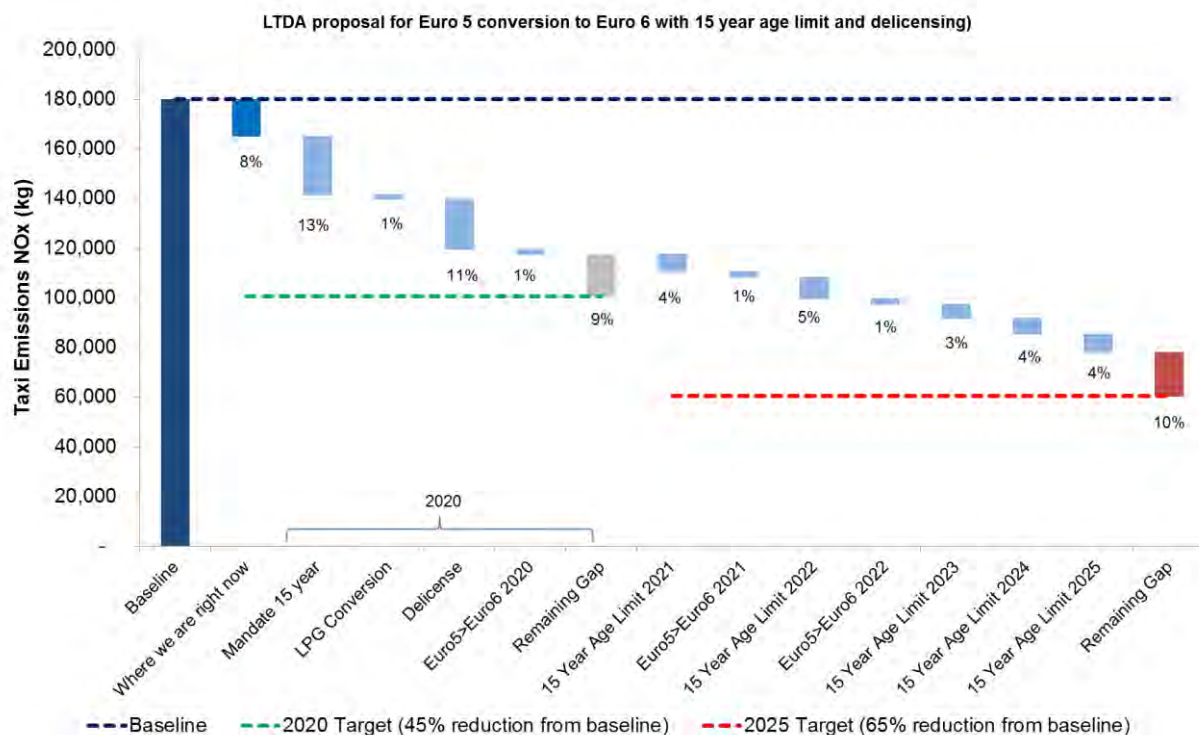
Response to updated calculations provided by the LTDA on 1 July 2019

On 1 July 2019, Steve McNamara (LTDA) submitted new calculations of the potential impact of a Euro 5 to Euro 6 conversion which achieves NO_x emissions of 0.5g per km.

In previous exchanges, Mr McNamara had expressed the view of the conversion company that a Euro 6 conversion may produce significant emissions savings over existing Euro 6 taxis, suggesting a figure of 0.5g of NO_x per km.

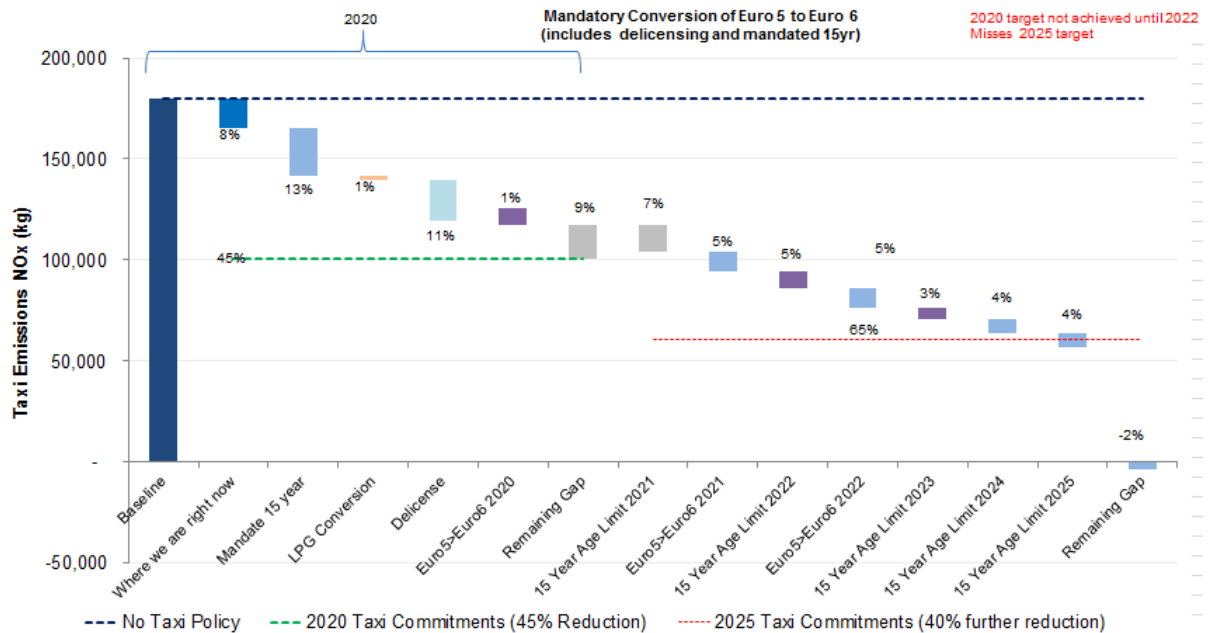
We modelled the LTDA alternative proposal of a Euro 5 to 6 conversion on a like for like basis with age limit proposals, using established (COPERT) Euro 6 NO_x emissions of 1.1g/km. This showed that a Euro 6 retrofit programme does not achieve greater NO_x savings than age limit proposals, and in fact misses the 2025 target reductions by 10 per cent.

Figure 1. LTDA Mandatory Euro 5 to Euro 6 conversion



We have since modelled the impact of a Euro 5 to Euro 6 conversion which could produce 0.5g NO_x per km on a three year rolling programme (as per the LTDA proposal), in line with the estimates put forward by the conversion company, and in the updated calculations provided by Mr McNamara. This is shown in Figure 2 below.

Figure 2. LTDA Mandatory Euro 5 to Euro 6 conversion based on NOx emissions of 0.5g/km

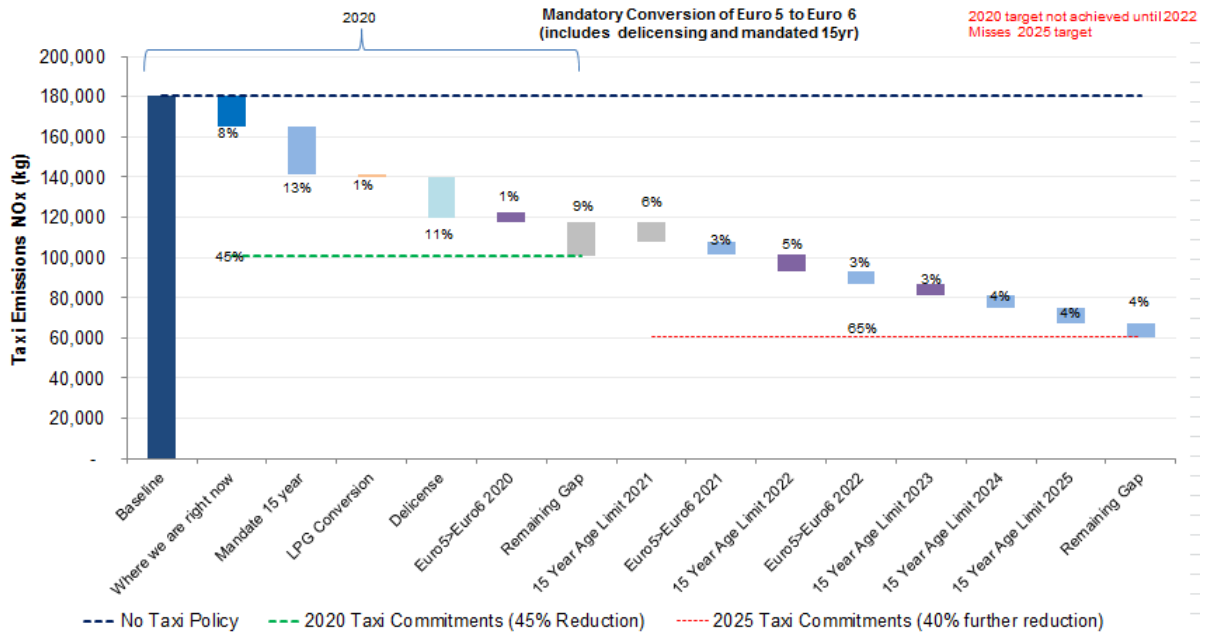


This shows that if all Euro 5 taxis were to be retrofitted to this standard over three years starting in 2020 (assuming the approval process is complete in 12 months) the 65 per cent reduction in emissions required by 2025 would be met.

However in our experience selective catalytic reduction (SCR) retrofit solutions can struggle to maintain the same level of NOx conversion efficiency in real world conditions compared with laboratory testing.

To consider what might be achieved with a slightly higher level of NOx emissions, we have also tested a scenario where the retrofit delivered NOx emissions of 0.8g/km. In this scenario, based on the same conversion rate as described above, it would only deliver a 61 per cent reduction in NOx emissions by 2025, therefore missing the legal requirement by four per cent as shown in Figure 3 below.

Figure 3. Mandatory Euro 5 to Euro 6 conversion based on NOx emissions of 0.8g/km



This analysis has shown that if the performance of the retrofit drops, or does not meet the 0.5 g/km NOx, there is a risk that the 2025 target would not be met.

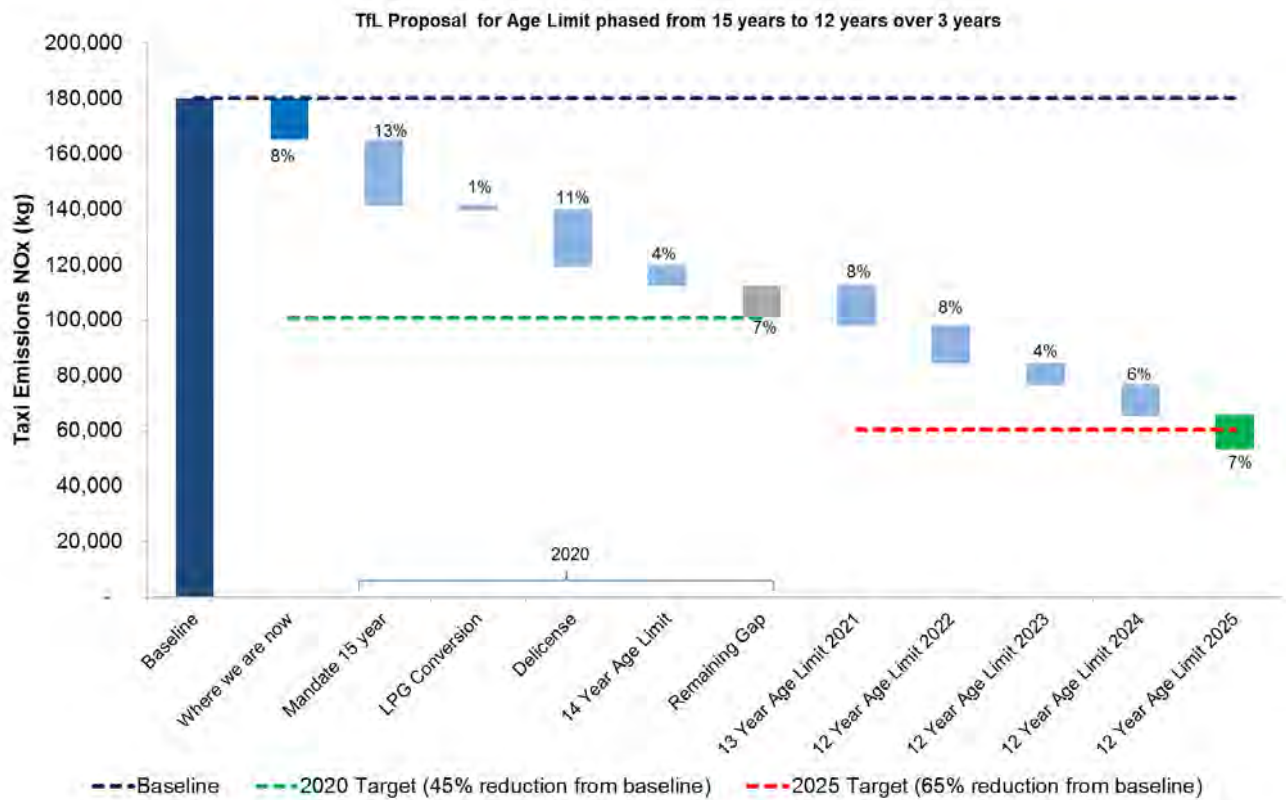
In addition, there is no approved diesel retrofit currently available, therefore no certainty that the scheme could be delivered as set out.

As described elsewhere in these documents, the approval process, accreditation and setting up the delivery mechanisms is expected to take at least 12 months. This level of uncertainty leads us to conclude that we cannot delay action.

It should also be noted that the emissions savings shown in Figures 1, 2 and 3 assume continued uptake of delicensing. In reality, however, this would not be possible if the delicensing scheme money were to be diverted towards a retrofit scheme. The figures above therefore present an optimistic scenario for emissions savings based on the proposals.

The age limit proposals provide certainty about the level of emissions savings that can be achieved, shown below in Figure 4. The Euro 5 to Euro 6 conversion options, do not, in any event, achieve greater results than the age limit proposals.

Figure 4. TfL phased age limit proposals



As stated elsewhere, we will work closely with the LTDA (and others) on any new proposals which can deliver emissions reductions from the taxi fleet. If a Euro 6 retrofit is developed, tested and approved in future, consideration will be given to ways to incorporate retrofitted Euro 5 taxis in the new Conditions of Fitness and age limits.