Appendices: 7



LICENSING COMMITTEE REPORT

Report	Taxi and Private Hire Vehicle Emissions Policy
Title	

AGENDA STATUS: PUBLIC

Committee Meeting Date 5th December 2017

Policy Document: Taxi & Private Hire Vehicle Emissions Policy

Directorate: Customers & Communities

1. Purpose

 To consider a Private Hire & Taxi Vehicle Emissions Policy to improve the air quality and reduce the health impact for the residents and visitors to Northampton Town

2. Recommendations

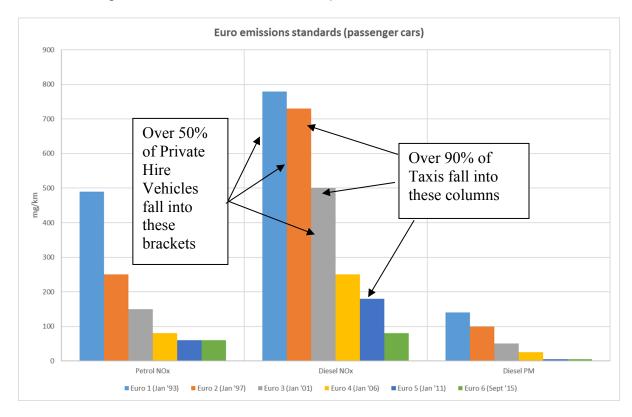
2. That taking account of consultation responses received, the Committee adopt the proposed Hackney and Private Hire Vehicle Emission Policy. **Appendix A**

3. Issues and Choices

Report Background

- 3.1 On the 13 September 2016 the Licensing Committee agreed for consultation to be undertaken in respect of the proposed Hackney and Private Hire Vehicle Emissions & Age Policy.
- 3.2 This report is only concerned with an Emissions Policy.
- 3.3 Consultation was undertaken between the 24th November 2016 and the 16th February 2017 and the findings of the consultation are detailed in **section 5** of this report.

- 3.4 Since a change in vehicle policy in 2012, the trade have voiced concerns that the standard of vehicles has fallen within the town and, in particular older vehicles are now being licensed that have high emissions, creating a less environmental friendly fleet of taxi and private hire vehicles. The Hackney trade have requested that an age policy is reintroduced, and have asked for this to be considered as a matter of urgency, to avoid a gradual increase in the number of older vehicles entering the trade.
- 3.5 The age policy has been deferred to a later date as any emission policy, if adopted, will restrict the minimum age of a licensed vehicle and has the potential to impact upon any maximum age policy.
- 3.6 The proposed policy, will remove the option to bring taxi/private hire vehicles registered before September 2009 for new petrol models and 2011 for all petrol models and 2014 for new diesel models and 2015 for most diesel models onto the licensed vehicle fleet with an immediate effect.
- 3.7 There are approximately 850 taxis (hackney carriages and private hire vehicles) currently operating in Northampton, with the majority being diesel cars. The majority of journeys are short, in and around the town centre, and therefore contribute to overall air pollution. Most taxi journeys take place within the urban centre with some high-use taxis covering in excess of 30,000 miles each year.
- 3.8 Although they make up only a small proportion of the overall vehicle numbers in the region, taxis do emit a higher proportion of NO_X and particulate emissions in key urban areas. These pollutants are the ones which have a proven impact on human health, so contribute disproportionately to poor urban air quality, exposing residents of Northampton to poor air quality. An extract of data showing the NOx emissions for diesel/petrol cars is shown below.



Note: The above graph shows the emissions by Euro Standard and the dates they came in and does not necessarily give the actual emissions in the "real world".

Particulates are considered the most harmful and there hasn't been any standards for petrol cars due to their low emissions.

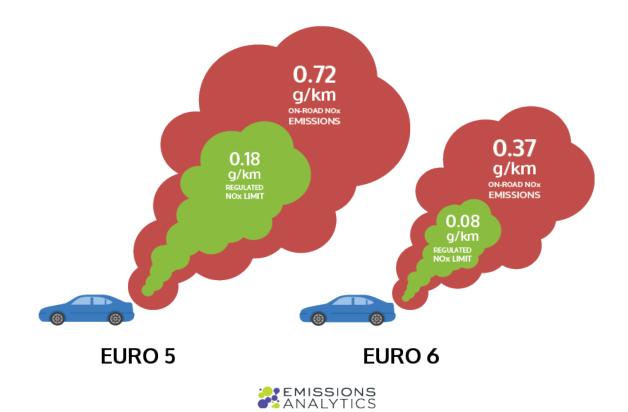
Diesel particulate filters became standard on Euro 5 diesels

3.9 The table below shows when each Euro Standard from Euro 3 commences.

Emissions standard	Applied to new passenger car approvals from:	Applied to most new registrations from:	
Euro 3	1 January 2000	1 January 2001	
Euro 4	1 January 2005	1 January 2006	
Euro 5	1 September 2009	1 January 2011	
Euro 6	1 September 2014	1 September 2015	

Further details of what each Euro Standard entails can be found in Appendix B

3.10 The picture below demonstrates the emissions in the "real world" of Euro 5 and 6 diesel cars and the aim of the proposed policy is to move all licensed vehicles towards lower emissions and encourage the use of zero emissions with either pure electric or electric/hybrid vehicles. The EQUA website (www.equaindex.com) provides independent real-world emissions data and this website and/or any equivalent recognised website, may be used in the future to determine the vehicles most suitable to meet the Northampton Taxi Emission Policy.



- 3.11 The proposed policy is designed to achieve a clean air zone standard in line with national Clean Air Zone Framework i.e. Euro 6 diesel, while encouraging take-up of ULEVs (75g/km or less of CO₂ and capable of 10km in zero emission mode. Technologies may evolve, meaning that suitable equivalent ULEV vehicles of different fuel types will be available in the future. To adapt accordingly the council will aim to consider a variety of vehicles in the future and seek to amend any vehicle specification where practical to incorporate ULEV standards. It should be noted that in addition to NOX, CO₂ levels are also a consideration for the impact upon the environment.
- 3.1.12 The table below detail the number of current licensed vehicles that fall into the different emission categories, with those highlighted green falling within the proposed lower pollutant emission categories, and those highlighted red falling into the higher pollutant emission categories.

CURRENT LICENSED PRIVATE HIRE VEHICLES (as at Sept 2016)		
Emission Standard	Number of Vehicles	
Electric	2	
Electric/Hybrid	180	
Euro 6 Diesel	0	
Euro 5	116	
Euro 4 Petrol	18	
Adapted	N/K	
Petrol (Standard Not Known) *	13	

Diesel (Standard Not Known) *	380
Total Vehicles	709
* likely to be Euro 5 or lower	

CURRENT LICENSED TAXI VEHICLES (as at Sept 2016)			
Emission Standard	Number of Vehicles		
Electric	0		
Electric/Hybrid	0		
Euro 6 Diesel	3		
Euro 5	36		
Euro 4 Petrol	0		
Adapted	N/K		
Diesel (Standard Not Known) *	111		
Petrol (Standard Not Known) *	0		
Total Number Vehicles * likely to be Euro 5 or lower	150		

- 3.13 Since the above figures were compiled our records show that over the last year there has been a sustained level in the number of high pollutant hackney carriage vehicles being licensed for the first time by this council. Figures detail approximately 30 hackney carriage vehicles, with an average vehicle age of 11 years old being presented for a licence for the first time in Northampton over the last year.
- 3.14 The private hire trade during the same period has shown an increase of around 70 electric/hybrid vehicles being licensed as <u>private hire vehicles and the Toyota Prius is, by far, the most popular model on the private hire fleet.</u>
- 3.15 It is important that any policy adopted now should have a long term aim, in order to avoid frequent changes that may impact upon the proprietor's financial investment into particular vehicles. It is proposed that there is a gradual implementation towards an improved licensed fleet to allow the time for financial adjustments. However, as demonstrated over the last year, the policy needs to reflect an almost immediate improvement by preventing a sustained, or growth of high polluting vehicles coming into Northampton.
- 3.16 The trade have been asking over the last year which vehicle they should purchase in light of the forthcoming proposals. Therefore the local authority has issued the statement below, in order to minimise any financial impact upon the trade should the committee decide to adopt one of the proposed emission policies and in order that the trade could consider alternative vehicles pending the outcome of this report.

"The local authority has recently undertaken a consultation on proposed changes regarding the emission standards of taxi and private hire vehicles that are

licensed by this authority. The results and any further proposals will hopefully be presented to a Licensing Committee around the summer of 2017. It is anticipated that there will be different proposal/s presented to the Licensing Committee and it will be a decision for the Committee to determine if they wish to adopt any changes or make no changes to the existing vehicle standard policy. Proprietors of vehicles are asking which vehicle they should buy during this interim period and unfortunately officers cannot pre-empt any outcome of proposed changes. However, we can advise at this stage that it is likely that the proposals will be aimed at removing the most pollutant vehicles and moving towards more environmental emission standard type vehicles such as a Euro 6 standard."

- 3.17 It is recognised that many proprietors buy vehicles as a long term investment, particularly taxi vehicles, the investment might be over 5-10 years and therefore this policy aims to strike a balance between improving the emission standards immediately for vehicles being licensed for the first time by this council, whilst still allowing time for existing proprietors/drivers of licensed vehicles to make financial adjustments and decisions about vehicles that they may be purchasing in the near future.
- 3.18 Due to vehicle specifications, it is recognised that that there is a difference between the saloon type of vehicles typically used a private hire vehicle and a purpose built taxi vehicle used for the hackney trade. There are some vehicles that may be licensed as either a private hire vehicle and/or a taxi vehicle.
- 3.19 It is a requirement of this local authority that all hackney carriages <u>must</u> be wheelchair accessible and research has shown that ULEV vehicles have been designed as purpose built taxis. Both Nissan and the new LEVC TX will continue to offer a fully accessible wheelchair vehicle with further enhancements. For example the new LECV TX will be the first purpose built taxi to offer a foreword facing wheelchair position.
- 3.20 There has been considerable investment into the development of a purpose built hybrid electric taxi and, on the 1st August 2017, LEVC (London EV Company) opened its order book for the all-new TX electric taxi with eCity technology. This new purpose built taxi has been designed for the trade and with a competitive financial package that demonstrates fuel efficiencies as detailed in **Appendix C**
- 3.21 The Dynamo Motor company has also opened its order books in conjunction with Nissan for a 100% electric purpose built wheelchair accessible hackney vehicle and a driving range of 170 miles. Nissan currently sell the eNV 200 all electric, disabled access taxi for £19,000.
- 3.22 For the private hire market there are also models, such as the Nissan Leaf and Toyota Prius, which will give efficiency savings. Whilst is it appreciated that these vehicles may have an initial higher outlay, both the purpose built taxi and the vehicles that are suitable as private hire vehicles, offer potential for efficiency savings. These savings may be further enhanced if the tax on fuels is increased in order to drive future changes towards ULEV. Total cost of ownership vehicle examples are detailed in **Appendix D**

- 3.23 In order to achieve a balance the proposed policy is aimed at different timescales for those vehicles being licensed for the first time in Northampton and those vehicles already licensed by this authority. It is also important to set standards, where possible, that are common to all within the taxi and private hire fleet, to ensure consistency with the emission standards and establish a level playing field for all licence holders.
- 3.24 A high percentage of vehicles purchased for the taxi and private hire trade are from the second hand car market, and it is foreseen that there is no reason why this cannot continue. Research has been undertaken and evidence can be found of the availability of Euro 6 standard vehicles suitable as hackney carriages as indicated in the table below. If a Euro 6 second hand diesel taxi is purchased in 2018, should the proposed policy be adopted this can continue to be licensed for approximately 7/8 years.

TAXI VEHICLE SECOND HAND MARKET					
TYPE	COST (NEW)	COST (USED)	STANDARD	YEAR	
LEVC TX5 (ELECTRIC)	55599 (2017)	NOT YET AVAILABLE	ELECTRIC	2017	
LEVC TX (ELECTRIC/HYBRID)		IN PRODUCTION	ELECTRIC/HYBRID	2017	
NISSAN DYNAMO (ELECTRIC)	49999 (Aprox)	PRODUCTION FROM 2018	ELECRIC	2018	
NISSAN ENV200 (ELECTRIC)	19,000 (Aprox)	IN PRODUCTION FROM 2016	ELECTRIC	2016	
LTI TX4	45395 (2017)	NOT YET AVAILABLE	EURO 6 DIESEL	2017	
PEUGEOT PREMIER	20000 (2017)	18000 (2016)	EURO 6 DIESEL	2017	
FORD JOURNEY	20695 (2017)	12995 (2015) – 19000 (2017)	EURO 6 DIESEL	2017	
VW KUDOS	23795 (2017)		EURO 6 DIESEL	2017	
FORD MAXICAB (TRANSIT)	24695 (2017)	18495 (2015) – 19195 (2017)	EURO 6 DIESEL	2017	
FORD PROCAB (TRANSIT)	33995 (2017)		EURO 6 DIESEL	2017	
MERCEDES M8 (VITO VAN)	44095 (2017)		EURO 6 DIESEL	2017	
LTI TX4		26000 - 32000	EURO 5 DIESEL	2013-2016	
MERCEDES VITO VAN CD113		12000	EURO 5 DIESEL	2011	
PEUGEOT E7	27495 (2017)	17995 (2013) - 19995 (2015)	EURO 5 DIESEL	2015	
LTI TXII (TX2)		2950 - 7500	EURO 3 DIESEL	2002 -2006	
LTI TX4		8950 - 10000 -	EURO 4 DIESEL	2007-2013	
LTI TX4		4500	EURO 4 DIESEL	2006-2009	
LTI TX1		Under 3000	EURO 1 OR 2 DIESEL	1997 – 2002	
METROCAB		Under 1500	EURO 1 OR PRE EURO		

The <u>private hire</u> second hand market has not been researched regarding Euro 6 as the last 12 months licensed vehicle figures indicate that the private hire trade are already moving towards electric/hybrid.

Under the Environment Act 1995 Local Authorities are required to assess air quality in their areas. Where any air quality standards or objectives are not being achieved, the local authority is required to designate an air quality management area and formulate an action plan to address the breaches of air quality standards.

Northampton currently has seven air quality management areas which are due to traffic pollution and has developed the Northampton Low Emission Strategy as part of its action planning process. An Air Quality Report (AQ) was presented to the Cabinet on the 13th September 2017. The Cabinet endorsed the establishment of a multiagency Air Quality Working Group to actively engage all stakeholders in the

implementation of the Low Emission Strategy and to develop further air quality initiatives.

Northampton is publishing its Low Emission Strategy (NLES) in December. The Strategy measures include looking at the feasible implementation of 'non-charging' Clean Air Zones (CAZ). This will include the setting of emission standards for buses and, in line with the national CAZ Framework, will need to include emission standards for taxis. The minimum national standard for diesel cars is Euro 6. The NLES licensed vehicle section can be viewed in the appendix of the Cabinet report published on the 5 December 2017.

As part of the Low Emission Strategy, a Northampton Electric Vehicle Plan is also being developed. This plan is aimed at working in partnership with Northamptonshire County Council on the following key objectives;

- Support the installation of a network of rapid charging hubs to facilitate a high growth rate in plug-in taxis and the use of smart technology to link taxi/private hire operators with charging infrastructure and customers
- Support home and workplace charging as the primary charging location utilising local planning, business support and private sector investment
- Creation of a strategic public charge point network that ensures electric car users reach their destination through a simplistic access, usage and payment model
- In line with our NLES; Air Quality & Planning Guidance and NCC Travel Planning Guidance to work with developers to provide practical charging solutions and support plug-in vehicle demonstration schemes on new residential and commercial developments
- Work with bus operators to develop ultra-low emission corridors
- Tackle the perceived and actual barriers to EV ownership through targeted marketing, promotion and information

Schemes already proposed, include the Northamptonshire Highways smart corridors that have identified charging points on three key travelling routes in and out of Northampton. These proposed schemes will be for general public use. **Appendix E**

Licensing Officers will continue to work with a number of key partners, including the Town Centre Manager, Car Park Operations Team, Northamptonshire County Council Highway, Independent Consultants and the licensed trade to identify and develop dedicated charging points for licensed vehicles. The infrastructure for the licensed trade is expected to grow gradually in line with the changes towards hybrid/electric vehicles.

The Office for Low Emission Vehicles (OLEV) has funding that may still be available to assist with supporting the changes in the licensed vehicle trade. Northampton are one of 15 local authorities who completed an Ultra Low Emission Taxi Study that was approved by Government (OLEV) which makes Northampton eligible for the

Government's ULEV Taxi Fund. However, it is important to note that if bids are unsuccessful local authorities can still continue to progress these changes through alternative schemes. This may for example be achieved by obtaining funding for charging points using the section 106 planning route.). **Appendix F**

The infrastructure for charging is not limited to one type of charging and will include a range of options including, for example, the ability to charge at home, workplaces and in car parks. Government funding is available to install electric charging in homes and car parks.

3.1 Issues

It has been considered if a policy should be proposed that only applied to new licence vehicle applications, in order to allow the high polluting vehicles to gradually decline. However, this has the potential for the licensed fleet to remain unchanged for an unspecified period of time.

If the Licensing Committee decides to take no action now, Northampton is likely to attract taxi and private hire vehicles that produce high levels of pollutant from other areas that are refusing to licence such vehicles. Whilst some higher pollutant vehicles have a financial benefits to the trade, it will not improve the air quality for the residents and visitors of Northampton.

It has been difficult to ascertain how many vehicles would have access to home charging due to the low response on this particular question in two recent surveys. This may impact upon the availability for overnight charging and this will need to be monitored and this council will be required to support initiatives for dedicated taxi/private hire charging points within the town.

Consideration has been given to vehicles that may be taken off the road due to unforeseen circumstances, i.e. involved in a vehicle collision. All of the proposed policies will apply equally to proprietors of these vehicles from January 2018 and any replacement vehicle will need to meet any policy that is adopted equally. This may have an immediate impact on existing proprietors by removing the option to buy an older vehicle at a low value, however the Euro 6 will be a suitable replacement that may be purchased second hand.

There have been direct responses from two companies who currently operate executive vehicles, identifying that there is currently no alternative for their type of operation and consideration should be given to high financial investment made by companies operating these type of vehicles, and the availability of hybrid/electric equivalent vehicles. A copy of these two responses is shown in **Appendix G.** It should be noted that research shows that there are several ULEV models available (plug-in hybrids) as executive vehicles. There is one executive taxi operator in Northampton that is already using the electric Tesla and charging for free at the Tesla rapid charging points at Junction 15 M1.

These companies also operate executive 8 seater vehicles and consideration may need to apply under delegated powers to depart from the policy, if it is agreed by a

senior manager that no other suitable vehicles are available on the market. Following research it has been noted that whereas there has been investment into the purpose built taxi and the typical saloon type vehicle operated by the private hire trade, there is limited availability at this present time for executive and 8 seater vehicles. This will only apply to those who currently hold exemption certificates, or a vehicle that is currently licensed as an 8 seater vehicle. It is estimated that this represents about 5% of the licensed vehicle trade.

It has been noted that a number of manufactures are developing ULEV light commercial vehicles and it is possible that 8 seater vehicles will follow, meaning that consideration to depart from the policy will be for a very limited period, or not required at all.

3.3 Choices (Options)

A delay in introducing the first phase of the proposed policies, would potentially have the same impact if it is delayed for a further year or two i.e. the number of high polluting vehicles will be sustained and may continue to grow, proprietors of licensed vehicles in a years' time would still be faced with the same issues upon the introduction of any new policy adopted in the future.

Further to the consultation on the proposed policy presented to the Licensing Committee on the 13 September 2016, it has been decided to propose a relaxed policy that has taken into consideration all of the comments and which allows a longer period for adjustments to be made.

3.3.1 Agree to Option 1 - Appendix A

The first phase from January 2018 will have an immediate effect by preventing a sustained level in the number of high polluting vehicles being brought onto the licensed fleet.

The second phase will apply from the end of <u>December 2020</u> to the proprietors of existing vehicles and is aimed at starting to remove the high polluting vehicles, from the existing fleet of licensed vehicles. Proprietors of these existing licensed vehicles will be required to invest in newer and cleaner vehicles within 3 years' time.

The third phase will apply from the end of <u>December 2025</u> to the proprietors of existing vehicles and is aimed at further removing the high polluting vehicles, from the existing fleet of licensed vehicles.

The fourth phase will apply from the end of <u>December 2028</u> to the proprietors of existing vehicles and is aimed at further removing the high polluting vehicles, from the existing fleet of licensed vehicles

The fifth phase <u>will</u> make it mandatory for all taxi/private hire new and existing licence renewals to purchase a ULEV vehicle from the end of <u>December 2030</u>.

Consideration needs to be given to proprietors who have purchased newer and cleaner vehicles in 2020 and asked to change again within a 5 year period.

Proprietors can consider purchasing one of the improved emission standard vehicles now, which can be kept for around 8/9 years, or purchase a ULEV or equivalent vehicle that can be licensed past 2028.

Any policy adopted can be monitored and reviewed if necessary.

3.3.2 Agree to Option 2 - no changes and keep the existing vehicle policy

This option will risk the influx of highly polluting vehicles into Northampton with the resultant impact upon air quality.

4. Implications (including financial implications)

4.1 Policy

- 4.1.1 Northampton Hackney and Private Hire Vehicle Standards Policy 2012
- 4.1.2 In adopting any policy, the committee should take a wider view and consider that for any policy to be successful in the future may require the support with other policy developments, including but not limited to:

Policy
Direction
Incentives
Infrastructure
Driver engagement

4.2 Resources and Risk

- 4.2.1 There is likely to be an impact upon the administration of the new policy. As currently no emission policy exists. Initially any new policy will involve more time for staff to verify if new vehicles presented for licensing fulfil the required criteria. However this impact can be minimised with good communication with the trade, ensuring good practices and staff training is undertaken. There may also be an impact upon staff resources to ensure compliance with the policy and reviewing necessary data, to ensure that the policy remains fit for purpose. As it is anticipated that the impact will be minimal it can be included within the current resources.
- 4.2.2 The proposed policies will require the support of internal and external partners in order to move forward with the development of suitable infrastructure for charging, in particular the licensed trade may have minimal home charging options and suitable charging points will be required.

4.3 Legal

- 4.3.1 The Local Government (Miscellaneous Provisions) Act 1976, allows the Local Authority to set conditions for the granting of taxi and private hire vehicle licences.
- 4.3.2 There is a legal requirement to improve and maintain air quality standards. Air Quality Directive 2008/50/EC13 sets out the obligations for Member States in terms of assessing ambient air quality and ensuring Limit Values (LV) for certain pollutants are not exceeded. The requirements of the Directive have been transposed into domestic law through the Environment Act 1995 and subordinate regulation14.15

4.4 Equality

4.4.1 There are no equality issues identified as this policy would apply equally to any proprietor of a Hackney or Private Hire vehicle in similar circumstances.

4.5 Consultees (Internal and External)

4.5.1 Director of Customers and Communities

NBC Legal

NBC Planning

NBC Northampton Town Centre Manager

NCC Highways

NCC Public Health

Consultation on the proposed low emission taxi and private hire vehicle policy

- 4.5.2 The aim of the consultation was to find out people's views on the potential introduction of a Taxi & Private Hire Emission Policy, as agreed at the Licensing Committee on 13th September 2016
- 4.5.3 Key stakeholders, including residents, licensees, and any other interested parties were invited to provide views on the possibility of a taxi/private hire vehicle policy being introduced to assist with improving the air quality in and around Northampton.
- 4.5.4 The Council engaged in a 12 week online public consultation via an open access online survey using 'Survey Monkey'. This was promoted through the council's social media and website. Over a 1,000 direct communications were sent to the trade, including emails and newsletters, drop in sessions were held for the licensed trade, attendance at operators and hackney association meetings, engagement with key stakeholders and partners.

4.5.5 Results

4.5.6 A total of 44 responses were received, 41 from the monkey survey consultation and a further two responses received via email/letter. One response was received as a

representation from the Hackney Association. Copies of the responses and comments are detailed in **Appendix G**

	Number of Responses
Hackney Driver	4
Private Hire Driver	22
Combined Driver	5
Operator	4
Member of Public	6
Letter/Email	3
Total Responses	44

4.5.7 A key summary of the findings:-

- 73% in support of using licensing policies to improve the air quality in Northampton
- **63**% supported the proposed policy to implement the changes to <u>new vehicle</u> applications with effect from the 1st January 2018
- **58**% supported the proposed policy to implement changes for <u>new and renewal</u> applications with effect from the 1st January 2020
- 48% supported the proposed policy to implement changes for <u>new and renewal</u> vehicles for only full electric, hybrid electric etc. from the 1st January 2025. Over 50% supported this proposed change applying to both <u>new and renewal applications</u>
- Over 50% supported all the above proposed changes applying equally to the private hire and taxi vehicles.
- 72% for policy to apply equally to both private hire & taxi vehicles
- 50% interested in any available funding for installing charging points

4.5.8 A key summary of the concerns raised by those objecting to the proposals;

- Need funding assistance to purchase newer vehicles
- Unfair to impose this only on the taxi/private hire change. Changes should be imposed on all vehicles on the roads.
- Need to reduce congestion in the town centre, i.e. buses on The Drapery sort the new bus station and Drapery out, or all of the above is a total waste of time and money. Reducing emissions from a few Hackney and Private Hire vehicles will be just a drop in the ocean. Stop recycling lorries using main routes at peak times.....

- Already have 6 monthly MOT with emissions test
- Private Hire metre should start from at least £2.75
- Can only just look after our family. Will mean finance or credit to have new car, will means lots of bankruptcy.
- Drivers will bear brunt of the cost in having to meet new standards. It is already
 economically difficult. Wider environmental issues should be taken into
 consideration
- There should be an exception to disabled vehicles with proper investigation
- The council should bear the costs
- The cost of buying a new car is putting me off; can't afford it

4.5.9 A key summary of the comments raised by those supporting the proposals;

- I welcome the proposal and strongly support the Councils proposal
- Each small change in lowering emissions is to be welcomed as we and our grandchildren will reap the benefits
- We should be doing all we can to improve the air quality for future generations
- There has to be a starting line and I think this a reasonable period of notice
- This should be manageable by most owners/operators
- The sooner air quality is improved the better for all
- There should be no differentiation between taxi or private hire especially as many of the taxis are much older.
- 4.5.10 There have been direct responses from two companies who currently operate executive vehicles identifying that there is currently no alternative for their type of operation. A copy of these two responses is shown in **Appendix G**

4.6 Other Implications

- 4.6.1 Licensing officers have visited trade shows to research the types of electric vehicles that will be coming onto the market. It was noted that all car manufactures already have, or are rapidly developing, new electric models that will be suitable as a private hire & taxi vehicles. However it was noted that the development of 8 seater hybrid/electric vehicles might take longer.
- 4.6.2 Therefore consideration may need to be given under delegated powers to depart from the policy, if it is agreed by a senior manager that no other suitable vehicles are available on the market. This will only apply to those who are licensed as at today's date for 8 seater vehicles and/or chauffeur exemptions. It is estimated that this represents about 5% of the licensed vehicle trade.
- 4.6.3 The vehicle manufacturers have developed the electric taxi, with the same company also moving into the light goods vehicles sector and traditionally many transit vans have been adapted to eight seater vehicles, i.e. Mercedes Viano and therefore these vehicles may develop soon after the transit vans.
- 4.6.4 An option to depart from policy has been included on all proposed policies to accommodate any unforeseen scenarios, for example if the manufacture of a particular model ceased and there was no alternative vehicle available. This option

will only be used in exceptional circumstances and will not be used based upon an individual's financial circumstances.

5. Background Papers

- 5.1 Northampton Town Low Emission Strategy Consultation
- 5.2 Northampton Borough Council Vehicle Conditions Policy
- 5.3 Local Government (Miscellaneous Provisions) Act 1976.
- 5.4 European Union emission control standards.
- 5.5 Department for Transport Taxi & Private Hire Guidance 2010
- 5.6 Office for Low Emission Vehicles
- 5.7 Northampton Low Emission Strategy 2018 2025

Louise Faulkner Senior Licensing Officer

Appendix A

Taxi licensing type and compliance dates	Emission standard	
All new registrations	ULEV taxi	
From: 1 st January 2018	Euro 6 petrol hybrid (Sept 2014/15)	
110III. 1 January 2018	Euro 6 petrol (Sept 2014/15)	
	Euro 5 petrol hybrid (Sept 2009)	
	Euro 5 petrol (Sept 2009)	
	Euro 6 diesel (Sept 2014/15)	
All licensing renewals	ULEV taxi	
From: 31 st December 2020	Euro 6 petrol hybrid	
Fiolii. 31" December 2020	Euro 6 petrol	
	Euro 5 petrol hybrid	
	Euro 5 petrol	
	Euro 6 diesel	
All licensing renewals	ULEV	
From: 31 st December 2025	Euro 6c petrol/hybrid	
From: 31 December 2023	Euro 6c petrol or equivalent standard (NOx,	
	PM) for other fuelled vehicles (including Euro	
	6c diesel subject to emissions)	
All licensing renewals	ULEV	
From: 31 st December 2028	Euro 6c petrol/hybrid or equivalent standard	
110III. 31 December 2020	(NOx, PM) for other fuelled vehicles	
All licensing renewals	ULEV	
From: 31st December 2030		

1.NBC will consider & implement incentives to promote the cleanest technologies - less than 75 g/km and at least 10 km zero emissions

2.NBC carried out an Ultra Low Emission Taxi Feasibility Study with potential for infrastructure funding and ULEV taxi (WAV) total plug in taxi grant of £7.5k, including Plug-in Car Grant (office for Low Emission Vehicles)**3.ULEV** = Ultra Low Emission Vehicle (<75g/km and 10km zero emission capability)

Delegated Powers: Licensing Officers discretion to depart from this policy in exceptional circumstances

Appendix B - European Emission Standards for Cars

Euro 4 (EC2005)

January 2005 (January 2006)

Euro 4 (January 2005) and the later Euro 5 (September 2009) concentrated on cleaning up emissions from diesel cars, especially reducing particulate matter (PM) and oxides of nitrogen (NOx).

Some Euro 4 diesel cars were fitted with particulate filters.

Euro 4 emission limits (petrol)

- **CO** 1.0 g/km
- **HC** 0.10 g/km
- NOx 0.08
- PM no limit

Euro 4 emission limits (diesel)

- **CO** 0.50 g/km
- **HC+ NOx** 0.30 g/km
- **NOx** 0.25 g/km
- **PM** 0.025 g/km

Euro 5

September 2009 (January 2011)

Euro 5 further tightened the limits on particulate emissions from diesel engines and all diesel cars needed particulate filters to meet the new requirements. There was some tightening of NOx limits too (28% reduction compared to Euro 4) as well as, for the first time, a particulates limit for petrol engines – applicable to direct injection engines only.

Addressing the effects of very fine particle emissions, Euro 5 introduced a limit on particle numbers for diesel engines in addition to the particle weight limit. This applied to new type approvals from September 2011 and to all new diesel cars from January 2013.

Euro 5 emission limits (petrol)

- **CO** 1.0 g/km
- **HC** 0.10 g/km

NOx – 0.06 g/km
 PM – 0.005 g/km (direct injection only)

Euro 5 emission limits (diesel)

- **CO** 0.50 g/km
- **HC+ NOx** 0.23 g/km
 - NOx 0.18 g/km
 - **PM** 0.005 g/km
- **PM** 6.0x10 ^11/km

Euro 6

September 2014 (September 2015)

The Euro 6 standard imposes a further, significant reduction in NOx emissions from diesel engines (a 67% reduction compared to Euro 5) and establishes similar standards for petrol and diesel.

Exhaust Gas Recirculation (EGR) – replacing some of the intake air (containing 80% nitrogen) with recycled exhaust gas – reduces the amount of nitrogen available to be oxidised to NOx during combustion but further exhaust after treatment may be required in addition to the Diesel Particulate Filters required to meet Euro 5.

Euro 6 diesel cars may also be fitted with:

- A NOx adsorber (Lean NOx Trap) which stores NOx and reduces it to Nitrogen over a catalyst
- Selective Catalytic Reduction (SCR) which uses an additive (Diesel Exhaust Fluid (DEF) or AdBlue) containing urea injected into the exhaust to convert NOx into Nitrogen and water.
- The use of Cerium, a fluid injected into the fuel tank each time the vehicle is refuelled which assists the DPF regeneration by lowering the temperature needed for regeneration.

Euro 6 emission limits (petrol)

- **CO** 1.0 g/km
- **HC** 0.10 g/km
- **NOx** 0.06 g/km
- PM 0.005 g/km (direct injection only)
- PM 6.0x10 ^11/km (direct injection only)

Euro 6 emission limits

(diesel)

- **CO** 0.50 g/km
- HC+ NOx 0.17 g/km
 NOx 0.08 g/km
- **PM** 0.005 g/km
- **PM** 6.0x10 ^11/km

Euro 6d-Temp, Euro 6d and Real Driving Emissions (RDE)

From 1 September 2017, more stringent and realistic tests will be used to certify new car models against the Euro 6 emission limits.

A new laboratory test cycle known as WLTP (the Worldwide harmonised Light duty Test Procedure) will apply to all new type approvals and a year later, from 1 September 2018, will apply to all new car registrations.

An additional, on road, emissions test known as the Real Driving Emissions or RDE test has been introduced alongside the WLTP laboratory test to help make sure that cars meet emissions limits in a much wider range of driving conditions.

An RDE test will last between 90 and 120 minutes and take in a mix of 'normal' urban, rural and motorway driving.

RDE is being introduced in two steps:

RDE step 1 – applies to new type approvals from 1 September 2017 and to all new registrations from 1 September 2019.

- For RDE1 a NOx conformity factor of 2.1 will apply meaning that NOx emissions in the RDE1 test can be up to 2.1 times the Euro 6 laboratory limit of 80mg/km.
- Cars type approved during this period will be described as meeting Euro 6d-temp.

RDE step 2 – applies to new type approvals from 1 January 2020 and to all new registrations from 1 January 2021.

- For RDE2 the NOx conformity factor is 1.0 but with an error margin of 0.5 meaning that NOx emissions in the RDE2 test can be up to 1.5 times the Euro 6 laboratory limit of 80mg/km.
- Cars type approved during this period will be described as meeting **Euro 6d**.

For cars first registered after 1 September 2017, the Euro standard to which it has been certified is shown on the V5c vehicle registration document and the online ' **Get vehicle information from DVLA** ' service.

In the **Autumn 2017 budget** the Chancellor announced an increase in the first year VED rate of one band for new diesels first registered from 1 April 2018 that don't meet the Euro 6d standard

Appendix C

INFORMATION FROM THE LEVC WEBSITE

LEVC – the London EV Company – formerly London Taxi Company, confirms costs and prices for all new TX with eCity technology:

- Finance package, at £177 [1] weekly equivalent price, inclusive of the battery over 5 years.
- Typical fuel saving for average driver of a £100 [2] per week over current model.
- Compelling UK launch offer on warranty and servicing with roadside assistance programme all inclusive
- Five years full unlimited mileage battery warranty industry leading for commercial EVs; Three years/90k miles free servicing; Three years/120k miles full vehicle warranty to include roadside assistance programme.

On the 1st August LEVC (London EV Company) opens its order book for the all-new TX electric taxi with eCity technology.

Ahead of taking deposits for the first time and opening the order book, LEVC confirms final pricing and indicative running costs for the all-new TX model. The launch finance package – through which more than 90% of drivers are expected to buy the new TX – is confirmed at £177 per week, including the battery over five years. The outgoing TX4 model was priced at £167 per week over four years.

Driving Range

Drive all day with a total range of 377 miles

You'll always be able to collect that extra fare thanks to the petrol range extender which gives you the flexibility to travel 377 miles before needing to plug-in - meaning you stop when you want to, not when you need to.

How does it work? When the battery gets low, the economic range extender kicks in and acts as a generator for the battery. This gives the electric motor extra energy to allow the taxi to continue driving.

Fuel Savings

The following example is based upon the typical working week of a driver in our current model, and illustrates the fuel savings possible if you maximise the range offered on the electric battery.

Typical Fuel Saving Example

If you drive 120 miles per day, 5 days per week, your weekly travel is 600 miles.

TX4 LE (Euro 6)

With the current cost of diesel at 117.7p per litre, your estimated weekly fuel spend is £139.

TX (The new Electric Taxi with eCity Technology)

In comparison, by owning a TX and charging the battery overnight you'll be able to leave your house each day with a fully charged battery. At the national average electricity price of 12p per kW, this would cost you about £16 each week. If you're on an economy 7 tariff that cost could be even lower.

For this example, we've also assumed you're able to stop for a total of 45 minutes each day to plug into a fast charge point. Based on an average cost per kW of 21p, this would cost around £17 per week.

We've adjusted the official projected electric range (70+ miles) to a real-world figure. Thanks to the charging opportunities shown above you would travel 520 miles per week on pure electric energy; that means the petrol range extender is only required for the remaining 80 miles per week. At 116.7p per litre of petrol we estimate this range extender mileage would cost £10 per week.

In total that's a fuel cost of £43 per week for the new Electric Taxi compared to £139 a week in diesel to fuel a TX4 - giving you a weekly fuel saving of £96.

Over a 5-year period, the savings really add up, in fact the above example equates to a total fuel cost saving of around £24,000.

We appreciate this typical example may not apply to *your* work patterns and circumstances. If that's the case, please use the interactive Running Cost Calculator above to compare the cost of driving your current taxi against the cost of running a TX - and see the indicative fuel savings you could achieve by switching to electric.

The new TX is now available from just £177/week* including 3 years FREE servicing (up to 100,000 miles).

Appendix D – Total Cost of Ownership (TCO)

Vehicle	Leaf (hatchback)	Octavia (hatchback)	Octavia (hatchback)	Prius (hatchback)
Manufacturer	Nissan	Skoda	Skoda	Toyota
Model details	80kw Visia 5dr	1.4TSI 140 SE 5dr	1.6TDI 105 S 5dr	1.8 VVT-I T3 5dr
Fuel type	Electric	Petrol injection	Diesel turbo	Petrol hybrid
Power (kw)	80	102.12	76.96	99.16
0-60mph (sec)	11.5	8.4	10.8	10.4
Euro std	NA	6	6	6
Price	£ 21,490	£ 18,860	£ 18,360	£ 21,995
3yr RV	£ 7,820	£ 7,075	£ 8,185	£ 12,665
New/used	New	New	New	New
Miles pa	25,000	25,000	25,000	25,000
mpg	NA	35	47	52.2
litres/km (kwh/km)	0.173	0.081	0.060	0.054
Tax band	Α	D	A	Α
Depreciation 3yrs	£ 13,670	£ 11,785	£ 10,175	£ 9,330
Tax £pa	£ -	£ 110	£ -	£ -
Fuel £pa	£ 519.00	£ 3,959	£ 3,054	£ 2,654
Servicing £pa	0	£ 185	£ 179	£ 202
Nox damage £/yr	0	f 11.06	£ 80.93	£ 7.41
PM damage £/yr	0	£ 17.54	£ 17.54	£ 17.54
CO2 damage £/yr	£ 144.94	£ 308.95	£ 268.16	£ 207.15
TCO for 1 yr (no depr)	£ 664	£ 4,591	£ 3,599	£ 3,089
TCO for 3 yrs inc depr	£ 15,661.82	£ 25,558.99	£ 20,973.21	£ 18,596.38



Appendix F



PLUG IN TAXI GRANT

Support for ULEV taxis through the Plug in Taxi Grant (PITG) and dedicated charegpoint infrastructure will see new investment in the UK automotive industry and improvement to city centre air quality.

The PITG is a national grant covering the UK. Any licensed taxi driver purchasing a new ULEV purpose built taxi can benefit from this grant.

A ULEV purpose built taxi is a vehicle which meets Transport for London's Conditions of Fitness for motor taxis in London as well as meeting the definitions of either category 1 or category 2 of the existing Plug in Car Grant (PICG). A category 1 vehicle must emit less than 50g/km of CO₂ and have a zero emission capable range of at least 70 miles. A category 2 vehicle must have CO₂ emissions of less than 50g/km and have a zero emission capable range of between 10 and 69 miles.

The PITG amounts for category 1 and category 2 purpose built ULEV taxis are £7,500 and £3,000 respectively. The amount of the grant will be automatically deducted from the price of the taxi when it is purchased. The dealership will complete the paperwork, so there are no application forms for the driver to complete. Both the driver and the vehicle will have to be licenced for the dealer to complete the grant claim.

Two purpose built taxis are expected to come to market in 2017. These are the London Taxi Company's TX5 and Frazer-Nash's new Metrocab built by Ecotive Ltd. Non purpose built ULEV taxis and private hire vehicles may attract grant funding under the existing PICG.

OLEV will review the rate of this grant on a regular basis.

March 2017

Appendix G – Consultation Comments

Comment

No vehicle suitable for our business is available at this time.

Our business provides chauffeur driven vehicles to clients and on a daily basis we spend approximately 30 minutes in Northampton and then head out of town. I feel the chauffeur section of Private Hire should be looked at separately as we cannot operate our services on a vehicle range of 200 miles when we can cover up to 500/600 miles on a full day booking where stopping to charge with a corporate client in the car is not a viable option.

We are not hackney private hire and although licensed as such we are a grey area that does not spend all day in the town causing the issues raised. If forced to use smaller, was quality vehicles, our business will suffer as companies outside the town could provide other types of vehicles that have not yet been forced to use hybrid cars. If in the future the type of vehicle that our business has been using for the past 12 years does become available and is tested and shown to be a viable option then the policy could then be introduced for the chauffeur trade also. This cannot be a 'blanket' policy to cover all licensed vehicles at once as we operate very differently to hackney or local taxis.

Comment

Email Sent: 10 August 2017 21:42

To: Louise Faulkner faulkner@northampton.gov.uk>;

Subject: Northampton Hackney Carriages

Now that everyone is showing concern for the environment, I thought this might be a good time to speak up for taxis. I think we are all in agreement that we would like to see the very oldest taxis off the road, because they degrade the whole service, but I would like to remind you all that ALL taxis are environmentally friendly in that they reduce the number of vehicle miles travelled. If commuters did not use taxis for the final stage of their journeys, but drove in to town themselves, then things would be much worse. All we need is a slight upgrade, not a drastic overhaul.

Thank you for your time

APPENDIX G (cont.) – Consultation Comments

DEAR LICENSING COMMITEE

A NUMBER OF HACKNEY DRIVERS ARE BECOMING CONCERNED OVER EXACTLY WHAT IS THE BEST FINANCIALLY VIABLE HACKNEY CAB TO BUY IF THE PROPOSED GUIDLINES GO AHEAD. WE ALL ARE FINDING IT VERY DIFFICULT TO PINPOINT EXACTLY WHAT WOULD BE A GOOD BUY.

FOR EXAMPLE A DRIVER ONLY LAST WEEK BOUGHT AN LTITX4 2012 MODEL FOR AROUND £15,000, BUT AS WE UNDERSTAND IT, THIS WILL ONLY BE GOOD, IN NORTHAMPTON, FOR 3 YEARS, NOT A GOOD BUY WE THINK YOU'D AGREE.

IT IS POSSIBLE TO BUY 3 CARS, ONE TO LAST UNTILL 2020, AND THEN 1 TO LAST UNTILL 2025 AND THE AN ELECTRIC TAXI FROM 2025 ONWARDS, WHICH DOESN'T SEEM VIABLE

SOME OF US FOLLOWED LICENCING DIRECTIVES AND BOUGHT OLD LONDON TAXI'S AND NOW, AS A RESULT, ARE GOING TO LOSE A LOT OF MONEY COME JANUARY 2018.

SO PLEASE COULD YOU HELP UNDERSTAND THE DO'S AND DONT'S THAT ARE NOT VERY CLEAR TO SOME OF US HUMBLE HACKNEY DRIVERS. SO WE DON'T MAKE THE SAME COSTLY MISTAKES AGAIN.

SO, PLEASE HELP, CONTACTING US BY MAIL OR EMAIL WITH YOUR ADVICE.

THANKS, THE DRIVERS



APPENDIX G (cont.) – Consultation Comments

Dear Louise

Further to our meeting today, I would just like to reiterate some of my concerns raised with you for your consideration.

Crown Executive Cars provides a high-level quality chauffeur service and does not operate within the town parameters on a "taxi basis".

We are airport and long distance specialists only and do not offer a local short distance service. Therefore there is no suitable vehicle currently available on the market of the executive quality and standard that we have built our reputation on over the past 23+ years or that would have the mileage range to cover our type of work (sometimes in excess of 450 miles a day).

I strongly feel that the chauffeur section of Private Hire should be considered totally separately from the hackney private hire vehicles. It is totally impossible for our vehicles to have to stop and recharge with important clients in the vehicle and, under these new proposals, this would have a major detrimental effect on our business.

As I am sure you are aware, all our vehicles (with the exception of one people carrier) are top of the range Mercedes Benz and we operate a rolling renewal scheme for all our vehicles. Therefore for the new proposed Electric/Hybrid legislation we would need to be planning for this at least 5 years in advance by 2020. However we are already faced with having to replace over 60% of our fleet that are Euro 5 within the next 30 months. As I am sure you can imagine this puts unacceptable pressure on our business strategy having to replace our fleet twice in the next 8 years.

If, in the future, the type of vehicle that our business has been using since its inception does become available with no detrimental effect on our business, I would be more than happy to consider incorporating them into my existing fleet. However, under the present circumstances, there is no way that the Council's new policy should be introduced as a "blanket" policy to cover all licensed vehicles as Crown Executive Cars could not operate within those guidelines.