

London Borough of Hammersmith & Fulham

CABINET

5th December 2016



EMISSIONS LINKED PARKING PERMITS

**Report of the Cabinet Member for Environment, Transport and Resident Services
– Councillor Wesley Harcourt**

Open Report

Classification - For Decision

Key Decision: Yes

Wards Affected: All

Accountable Executive Director: Mahmood Siddiqi – Director for Transport & Highways

Report Author: Edward Stubbing,
Transport Planner

Contact Details:
Tel: 020 8753 4651
E-mail: edward.stubbing@lbhf.gov.uk

1. EXECUTIVE SUMMARY

- 1.1. There is growing pressure on the transport sector to address the health concerns caused by vehicle emissions. The current administration's manifesto and the boroughs Air Quality Action Plan both require action to be taken to address these concerns. Promoting the use of greener vehicles through a emission based permit scheme could help to reduce ownership levels of more pollutant vehicles. At present there are only two types of resident parking permits, either a standard permit or a green permit offered to vehicles that are Euro 5 compliant. There are presently no surcharges for diesel engines, or larger vehicles.
- 1.2. Nationally transport accounts for about 21% of all greenhouse gas emissions in the UK. Work by TfL and the GLA have identified that within London this number is substantially higher at close to 50%. Private vehicles account for a major part of these emission levels and in Hammersmith and Fulham can be split into two main groups, those being kept in the borough, and those commuting through. At present emissions from residents vehicles are estimated to account for roughly a quarter of all private vehicle emissions in the borough. This report details several

measures that could be introduced in order to promote the ownership/ increased uptake of lower emission vehicles.

- 1.3. This report reviews the current parking permit structure and pricing and proposes a restructuring in order to address the need to encourage a reduction in vehicle emissions. Parking policy can not be used solely as a fiscal tool, the financial plan outlined in this report is aimed to incentivise lower emission vehicle ownership through discounted permits, with the focus of the permit structure being to improve the air quality in the borough. The report recommends that Hammersmith and Fulham offer free resident parking permits for fully electric vehicles (vehicles without any form of combustion engine), and then offers a sliding scale permit system to all other vehicles, based on the euro emission standard that the vehicle complies with. It is also recommended that a Diesel surcharge be introduced to all Diesel vehicles which are classified as Euro 5 or below.

2. RECOMMENDATIONS

- 2.1. That Hammersmith and Fulham offer free resident parking permits for fully electric vehicles (vehicles without any form of combustion engine).
- 2.2. That the introduction of a sliding scale of permits based on the Euro emission standard of the vehicle for all resident permits, be agreed. This is detailed in Option 3 of section 5. It would mean vehicles are categorised based on a range of emissions including Co2, NOx and Particulate Matter.
- 2.3. That the introduction of a separate Diesel surcharge to all non-Euro 6 diesel vehicles who obtain a resident permit, be agreed. This surcharge is introduced as a measure to encourage consumers to consider the environmental impact of their vehicle choices and in recognition of the substantially higher amounts of NOx and PM that diesel engines produce.
- 2.4. That both the new permit structure and the diesel surcharge are introduced in April 2016. Both of these measures will include predetermined charges which will increase over the first four years in order to allow adequate time for consumers to adjust their vehicle types.

3. REASONS FOR DECISION

- 3.1. Hammersmith and Fulham's Air Quality Action Plan aims to reduce the level of emissions produced in the borough. The reduction of emissions from transport is also a manifesto commitment of the current administration. Private vehicles are one of the main components of the transport sector and in Hammersmith and Fulham they account for about 50% of all emissions generated by transport. Private vehicles owned and operated by residents are a significant source of emissions as they account for approximately a quarter of all trips made by private vehicles in the borough.

- 3.2. The recommendations included in this report have been reviewed and supported by the Air Quality Commission. This commission has been formed to spearhead the push towards alerting and improving air quality within the borough. The commission feel that the proposed permit structure represent a suitable message and stance for the council to show that air quality is a serious consideration of the council.
- 3.3. The classification and price of parking permits can be an effective tool in encouraging the take up of low emission vehicles by residents. The present permit classifications allow any vehicle which is Euro 5 compliant or newer (see Table 1 below), to apply for a green permit, which is half the price of a regular permit. To encourage residents to consider the emissions of the vehicle they own, this report recommends that Hammersmith and Fulham offer free resident parking permits for fully electric vehicles as these are currently seen to represent the greenest option for private vehicles. A fully electric vehicle runs entirely off electricity and does not contain any form of combustion engine such as petrol, diesel or gases (note no type of Hybrids are classified as a fully electric vehicle).
- 3.4. Diesel engines have been found to produce significantly higher levels of particulate matter and NOx, compared with petrol engines. The Euro 6 banding is the first banding where the permitted emissions for PM and NOx are the same for both Diesel and petrol engines (Table 2 gives details of the permit values). As such a Diesel surcharge on Euro 5 and older vehicles will encourage owners to consider changing their vehicles for less pollutant models.
- 3.5. Any changes to the permit structure for residents will affect all the wards in the borough. At present permit prices are only altered at the beginning of each financial year, if at all. In order to provide sufficient time for residents to adjust to the new permit structure and for it to have an impact on consumer choices, a four year phased increase in the permit prices is recommended to reach the targeted price structure.

4. BACKGROUND

- 4.1. Hammersmith and Fulham have offered residents parking permits in Controlled Parking Zones since the first zone was introduced to the borough in the 1960's. At present parking permits are available for cars belonging to both residents and business. These are available on either a six month or twelve month basis. Each resident or business is able to purchase a maximum of two permits, with the price of the second permit being higher. At present the standard first residents permit is priced at £119 per year. Motorcycles are not currently required to purchase a permit or Pay & Display ticket when parking in any bay in the borough.
- 4.2. Hammersmith and Fulham currently offers two classifications for resident permits, a standard parking permit and a green parking permits which provides a reduced rate price to vehicles which meet the Euro 5 emissions standards (see Appendix 1). The green permit is presently only available on a twelve months

basis, as the cost of a six month permit would not cover the administration costs. The price of the green permit is presently £60 for a twelve month period.

- 4.3. The Euro 5 emissions standard is a European Union (EU) rating on the maximum acceptable exhaust emissions from newly manufactured vehicles. The standard currently measures a number of emission particles including Nitrogen Dioxide, Carbon Monoxide and Particulate Matter. Table 1 below gives details of the current requirements of each Euro emissions standard.

Table 1: Euro Emission Compliance

Tier	Date	CO ₂	THC	NMHC	NO _x	HC+NO _x
Diesel						
Euro 1	Jul-92	2.72 (3.16)	-	-	-	0.97 (1.13)
Euro 2	Jan-96	1	-	-	-	0.7
Euro 3	Jan-00	0.64	-	-	0.5	0.56
Euro 4	Jan-05	0.5	-	-	0.25	0.3
Euro 5a	Sep-09	0.5	-	-	0.18	0.23
Euro 5b	Sep-11	0.5	-	-	0.18	0.23
Euro 6	Sep-14	0.5	-	-	0.08	0.17
Petrol (Gasoline)						
Euro 1	Jul-92	2.72 (3.16)	-	-	-	0.97 (1.13)
Euro 2	Jan-96	2.2	-	-	-	0.5
Euro 3	Jan-00	2.3	0.2	-	0.15	-
Euro 4	Jan-05	1	0.1	-	0.08	-
Euro 5	Sep-09	1	0.1	0.068	0.06	-
Euro 6	Sep-14	1	0.1	0.068	0.06	-

emissions requirements in g/km

CO₂ – Carbon Dioxide, THC – Total Hydrocarbon, NMHC – non-methane Hydrocarbons, NO_x – Nitrogen Oxides, HC - Hydrocarbons

- 4.4. Euro 6, which came in to effect in September 2014 is the latest version of the rating. Any new model of car sold in the EU after this date is required to meet these emissions standards. The main change between Euro 5 and Euro 6 is the controls on Diesel engines, where the amount of NO_x emissions permitted has been cut by more than half.
- 4.5. Hammersmith and Fulham are currently looking to introduce a number of schemes and changes aimed at improving the air quality across the borough. The air quality objectives are detailed in the Council's Air Quality Action Plan, and the action points and progress from this report are currently being monitored

and reported on a regular basis. Data provided in the 2014 air quality progress report shows that private cars account for 34% of total NOx emissions and 55% of PM10 in the borough. Both of these types of emissions are dangerous to people's health and the Council aims to reduce the levels of each.

- 4.6. The Euro emission standards also impose restrictions on the amount of CO2 being produced. CO2 is a primary cause of climate change, as well as posing health risks in concentrated amounts. Appendix 2 shows a breakdown of transport emissions by vehicle type, private vehicles presently account for 58.9% of all transport generated CO2 in the borough.
- 4.7. The health impacts of emissions are a key reason for the growing pressure to more carefully monitor and control them. In the UK an estimated 29000 deaths a year are attributed to particulate matter. Table 2 below details the current limits on PM for each Euro emission standard.

Table 2: Euro emission standards Particulate Matter levels

Euro Emission Standard	Petrol Engine (PM)	PM per Km³	Diesel Engine (PM)	PM per Km³
1	no limit	no limit	0.14 g/km	no limit
2	no limit	no limit	0.08 g/km	no limit
3	no limit	no limit	0.06 g/km	no limit
4	no limit	no limit	0.025 g/km	no limit
5	0.005 g/km	no limit	0.005 g/km	6 x 10 ¹¹
6	0.005 g/km	6 x 10 ¹¹	0.005 g/km	6 x 10 ¹¹

- 4.8. The DVLA do not currently classify vehicles for road tax by NOx or Particulate Matter. The EU classification for vehicles does however include these emission types as well as others when considering classification. As the EU or euro classification includes more emission types it is considered that this represents a more advanced format to judge exhaust emissions by.
- 4.9. Many other London boroughs offer some form of emissions linked parking permit, although there is a range of different approaches taken. Some boroughs such as Islington and Camden operate a CO2 linked categorizing process (see Appendix 3). Some boroughs, such as Barnet and Lewisham, offer reduced price permits for greener vehicles but do not charge vehicles with higher emissions more than the standard rate.
- 4.10. Transport for London are in the process of consulting on an Ultra Low Emission Zone with the aim of improving air quality. To qualify as "Ultra Low Emission" , private vehicles must be Euro 6 compliant. All other vehicles will be required to pay the ULEZ charge when entering the zone, which will operate 24hrs a day, 7

days a week. Euro 6 compliance is currently considered by most local and national authorities to meet the current definition of 'green' transport.

- 4.11. The Euro 6 emission standard, when adhered to, does represent a significant reduction in exhaust emissions compared to previous standards. It has recently been highlighted that vehicles that meet this standard in test environments, may not be actually doing so in the real world. Unfortunately at this time there are few alternative classifications that can be used, and Hammersmith and Fulham are not in a position to introduce their own testing so must rely on national and EU bandings.
- 4.12. There are currently a number of different classifications of vehicles that have electric components to their engines. There are fully electric vehicles that run solely on electricity and have no other form of power. There are also hybrid vehicles which have both electric and combustion engines. 'Half' or 'internal' electric cars as they are often referred to are vehicles with the ability to create their own electricity, either through the combustion engine powering the car and charging the battery at the same time, or in some more advance models through the generation of kinetic energy (e.g. by charging the battery with the energy generated when the car is braking). The other main type of hybrid currently growing in popularity is the plug-in hybrid. These vehicles have the ability to charge the battery through an external source.
- 4.13. At present Hammersmith and Fulham issues about 33,000 permits per year, with about 29,000 of these being resident permits. In the 2013/14, 28,726 first permits were issued, with 353 second permits issued. Of these permits 966 (3.3%) were low emission vehicles who paid for a green permit.
- 4.14. Hammersmith and Fulham's current parking permit database does not store information on the type of engine that permit holders have, so national statistics have been used to estimate the number of permit holders in each category of vehicles.
- 4.15. The Pay & Park team which administer the applications, renewals and issuing of parking permits are currently in the process of having new back office software prepared for them. This new software will also allow applicants to apply for their parking permits online, something that has not previously been possible. This new system is key to any emission linked permit system as it will provide an automatic look up system which will band the vehicle based on emissions and determine which permit category it should be in.

5. PARKING PERMITS OPTIONS AND ANALYSIS

- 5.1. The options below are based around two principal schemes for the categorising of resident permits; a sliding scale system based on euro emissions categories and a system that is based on offering a reduced rate permit for 'green' vehicles. Both schemes prioritise vehicles with lower emissions of CO₂. However the sliding scale system also includes NO_x and PM emissions. In all the options fully

electric vehicles that produce no exhaust emissions should be issued with free parking permits.

- 5.2. **Option 1:** This option would see all vehicles that currently have an electric element to their operation being offered a free residents' parking permit (this would include full, half and plug in hybrids as well as fully electric vehicles). There would continue to be a reduced permit for any Euro 6 compliant vehicles, with a regular residents' permit for all remaining vehicles.
- 5.3. **Option 2:** Any fully electric vehicle would be entitled to a free residents' permit (this would not include full, half or plug in hybrids). Any vehicle that was Euro 6 compliant would be eligible for a reduced permit. All other vehicles would have a standard residents' parking permit.
- 5.4. **Option 3:** In an attempt to offer a permit scheme aimed at categorising vehicles by more than just CO2 emissions, this scheme would use the European emission standards as the primary banding. This would mean categorising the permit price based on which of the six current Euro emission standards the vehicle belongs to. There would also need to be two additional categories, one for fully electric vehicles and another for vehicles pre dating the Euro emissions standards (vehicles from before 1992).
- 5.5. All of these options require the parking permits team to be able to check and verify the vehicle information, including the emissions levels and whether it is Euro compliant in order to issue a permit. This happens currently with the green permit using a manual check of the vehicle's V5C registration document. However, this information can also be retrieved by linking with the information stored by the DVLA. The new SPUR permit system due to be introduced in early 2016 will include this facility. This will mean users are automatically put into the correct permit band, rather than requiring them to verify it themselves.
- 5.6. It is anticipated that the new software currently being rolled out for the parking permits team will speed up the process of reviewing and checking permit applications. As part of this new software package, officers would be able to auto fill data from DVLA records which will improve the application processing speed and allow for quicker checking and classification of the permit type. We are also confident that this would help to further reduce incorrect permit categorisation, as well as permit fraud.
- 5.7. There are currently a number of vehicles that have been grandfathered into the existing green permit from previous schemes. As there is proposed to be a complete change to the structure of the parking permit system under option 3, if this option is chosen it is recommended not to grandfather any of the existing green permit vehicles into a different band than the one they qualify for. This is due to the fact several of them have already been grandfathered before and that others of them no longer represent a level currently being considered as 'green'.

6. SURCHARGES

- 6.1. Several London boroughs have introduced surcharges as part of their permit systems. Examples of these include Diesel surcharges employed by boroughs such as Islington and Kensington & Chelsea. Several variations of congestion surcharges are also used in other major cities, including limiting vehicles by number plate from commuting, and charging vehicles based on size.
- 6.2. The Diesel surcharge currently being used by Kensington and Chelsea is applied to all Diesel engines that are not Euro 5 compliant. However Euro 5 engines still produce considerably higher levels of NOx and PM than are currently recommended by the Air Quality Action Plan. It is therefore recommended that any Diesel surcharge should apply to all diesel vehicles that are not Euro 6 compliant, as this standard compares more closely with emission levels of petrol engines. Kensington and Chelsea charge £19 at present for their surcharge, but they intend to increase it gradually in future years.
- 6.3. The implementation of a Diesel surcharge would directly target the emissions of NOx which the Air Quality Action Plan and the Department for Environment, Food and Rural Affairs (DEFRA), identify as being extremely hazardous to personal health and well being. Local and central government are under increasing pressure from the EU to reduce the levels of NOx in the air, particularly in urban areas. Placing a surcharge on Diesel vehicles is one method being employed to change user behaviour and try and encourage a modal shift away from Diesel powered combustion engines.
- 6.4. There are several other surcharge schemes that have been tried in various cities across the world. One issue currently facing many London boroughs is the growing width of vehicles. Many vehicles are now exceeding the 1.8m width, which the Department for Transport (DfT) have previously considered the maximum width of a car, and is currently the minimum width of an on street parking bay. This is causing issues on narrow streets as the flow of traffic is affected by parked vehicles that narrow the carriageway width. Surcharges have been placed on larger vehicles that are considered to occupy more space, as a measure to try and reduce their number. The surcharge is usually placed on any vehicle classified as a 4x4 vehicle (which tend to be the type that are wider than 1.8m), however the final decision on which vehicles fall in to this classification would be the decision of the local authority.

7. FINANCIAL IMPLICATIONS

Resident Permits

- 7.1. Any changes to the current pricing points and categories of the residents parking permits will have an impact on annual revenue generated. At present it is forecast that annual revenue from the residents parking permits is £3,403,407.
- 7.2. It is estimated that about 8% of residents own vehicles that would qualify under the Euro 5 emissions compliance. It is difficult to make accurate forecasts about

the number of Euro 6 compliant vehicles as the current database does not provide these details.

- 7.3. The latest data from the DfT shows that in 2013, only 2.1% of all cars were Euro 6 compliant (see Appendix 4). However this was double the number compliant in 2012. Based on the initial data and forecasts from the DfT it is estimated that more than 540,000 Euro 6 cars will be registered in 2014 and about 900,000 in 2015 (approximately 55% of all cars registered in 2015 will be Euro 6). These estimated numbers would mean that about 2.1million of the 36 million registered cars on the road in 2015, would be Euro 6 compliant. Table 3 below therefore assumes 6% of vehicles will be eligible for the Euro 6 discount rate, and estimates the number of other permits holders vehicles in each class for 2015.

Table 3: Estimated number of current permit holders in each emissions classification in 2015

Compliance	Number of Cars in H&F
Euro 6	2241
Euro 5	7257
Euro 4	9151
Euro 3	8341
Euro 2	565
Euro 1	565
Pre date	609
Total	28729

- 7.4. The DfT suggest that in 2015 there will be about 800,000 hybrid vehicles registered in the UK. This would equate to about 2.2% of all vehicles on the road. In Hammersmith and Fulham this would mean about 632 cars are hybrid engines based on current permit numbers.
- 7.5. Of total car ownership in the country less than 0.01% of vehicles are fully electric cars. This means that about 1 in 10,000 vehicles are electric. However statistics show that of the 28,729 vehicles registered for resident permits within the borough 22 of them are currently fully electric vehicles (0.08%), eight times that of the national average.
- 7.6. National ownership trends show that as technology improves and the associated cost of purchasing these vehicles decreases, there will continue to be a significant increase in the ownership levels of both hybrid and electric vehicles.

Surcharges

- 7.7. DfT records suggest that about 36.2% of all vehicles registered at present are diesel engines that are below Euro 6 compliance. Using this information it is

estimated that 10,860 of the current permit holders are operating diesel run vehicles that do not meet the Euro 6 standard. The original diesel surcharged proposed by some boroughs has been £15, although Kensington and Chelsea currently charge £19 and Islington use a sliding scale which goes to a maximum of £100. For the purpose of the calculations below a range of values have been used.

- 7.8. There are currently about 90 Diesel that receive the green parking permit that are not Euro 6 compliant. Under the proposed surcharge these vehicles would be subject to the charge. There is the option to grandfather these vehicles across and not charge them, however this would contradict the reason for introducing the emission charges.
- 7.9. The surcharge placed on 'larger' vehicles would apply irrespective of which permit option was chosen. DfT statistics are quite vague on vehicle width, however estimates suggest about 4% of all vehicles are considered 4x4s. Not all of these vehicles would be wider than the 1.8metre alluded too, although many of the newer vehicles do exceed this limit. As such estimates place about 1% of vehicles in to the 'larger' vehicle category, this would equate to about 300 current permit holders. The surcharge placed on these vehicles could be adjusted, but it is essential that the price is sufficient to act as a deterrent to ownership of such a vehicle.

8. EQUALITY IMPLICATIONS

- 8.1. The proposed changes to the pricing structure and permit types is designed to promote the increased uptake by residents of low emission vehicles. The main tool being employed to do this is an increase in the cost of parking permits, however the increases are steeper for more pollutant vehicles. It is recognised by officers that this pricing structure will mean that those owning older vehicles will be subject to increasing parking permit charges.
- 8.2. There is a risk to those less economical well off, as these people are more likely to own older cars which are less emission friendly. As such the new permit structure and associated prices may have a greater impact on this sector of residents.
- 8.3. A separate EIA form has been completed and attached after the appendix.
- 8.4. Completed by: Edward Stubbing, Transport Planner , Ext. 4651.

9. LEGAL IMPLICATIONS

- 9.1. Regard has been had to the implications of the public sector equality duty contained in Section 149 of the Equality Act 2010.
- 9.2. Section 46A of the Road Traffic Regulation Act 1984 (together with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996) provides for variations in charges at designated parking places. Any charges

introduced must not be for revenue raising purposes (as per R –v- L B Camden ex p Cran (1995)).

9.3. Completed by: Lindsey Le Masurier, Solicitor, 020 7361 2118

10. FINANCIAL AND RESOURCES IMPLICATIONS

10.1. Parking policy is based upon traffic management requirements and not on the financial consequences of those policies. However, councils are permitted to plan for the financial consequences of parking policy and the financial implications are set out in the body of the report.

10.2. The recommended option for parking permits is the introduction of a new schedule of charges based on the car's European emission standards rating plus free parking for fully electric vehicles. Based on an estimate of the numbers of cars in the borough at each Euro standard category, this would increase the income from Parking Permits by £75,000 in 2016-17.

10.3. The introduction of a permit surcharge for diesel vehicles will generate additional revenue. The estimated amounts are shown in tables 6a, 6b and 6c, depending on the value of the surcharge.

10.4. This will be taken account of in the council's future financial planning.

10.5. Comments provided by Mark Jones, Director for Finance, x6700.

11. BUSINESS IMPLICATIONS

11.1. This report only proposes a change to the structure and pricing of resident parking permits. There would be no change to business permits. Officers anticipate that these proposed changes are unlikely to have any impact on businesses within the borough. The new permit structure is not anticipated to lead to an overall increase in car ownership, which would likely mean no change to current parking stress levels across the borough.

11.2. Completed by: Edward Stubbing, Transport Planner, ext. 4651

12. RISK MANAGEMENT

13.1 The introduction of the emission based scheme requires users to be banded based on emissions. It has been recognised that asking users to determine their own banding is likely to result in a large number of wrong banding selections. As such the SPUR system will need to be altered to automatically determine the banding. This element of the system is still in production and there is the risk that this is not completed by the deadline meaning the launch would have to be delayed.

13.2 The diesel surcharged is proposed to be introduced first at £20, before rising to £60 over two years. Although this represents an increase compared to existing

no extra charge position, it may be an insufficient surcharge to encourage any change in user behaviour. It is also possible that the proposed four year increase in prices of the sliding scale of permit charges may not be sufficient to induce change. These risks could be reduced if user patterns do not change by increasing the surcharge after the initial phase in.

13.3 Completed by: Edward Stubbing, Transport Planner ext. 4651

13. PROCUREMENT AND IT STRATEGY IMPLICATIONS

14.1 There are no new IT or procurement requirements as a result of the proposals. A recent tender exercise has awarded the contract for the provision of the parking permit database to Xerox. The SPUR solution they offer features the required capacity to change the structure and introduce a surcharge.

14.2 The online verification and banding of applicants is still in development phase, however this is due to be ready before the roll out of the system begins.

14.3 Completed by: Edward Stubbing, Transport Planner, ext. 4651

LOCAL GOVERNMENT ACT 2000 **LIST OF BACKGROUND PAPERS USED IN PREPARING THIS REPORT**

No.	Description of Background Papers	Name/Ext of holder of file/copy	Department/ Location
1.			

LIST OF APPENDICES:

Appendix 1

Current Parking permit structure and charges

Appendix 2

Table with Transport Emission by vehicle type for H&F and Greater London

Appendix 3

Islington's current permit structure and charges

Appendix 4

DfT vehicle ownership statistics

Separate Finance Appendix

Financial implications of the proposed new permit structure and surcharge

Appendix 1

Parking permit charges

Current parking permit charges

As part of the council's parking policy we review our parking permit charges on an annual basis.

Residential (incl White City off-street parking permits)

- **first permit**
6 months - £71
12 months - £119.
- **second permit**
6 months - £260
12 months - £497
- **green vehicle residents permit** - 12 months £60 (Euro 5 compliant and emitting less than 100g/km of co2)

Business

- **first permit**
6 months - £464
12 months - £791.
- **second permit**
6 months - £735
12 months - £1310 .

Doctor's

- 12 months - £126.

Appendix 2

Hammersmith and Fulham

Mode	CO2	NOx	PM10 Exhaust	PM10 Brake	PM10 Tyre	PM10_Total	PM25 Exhaust	PM25 Brake	PM25 Tyre	PM25_Total
Motorcycle	2701.7	2.5	0.2	0.5	0.1	0.8	0.2	0.2	0.1	0.4
Taxi	4597.6	16.8	0.8	0.8	0.2	1.8	0.7	0.3	0.1	1.2
PetrolCar	35678.5	21.3	0.4	7.6	1.7	9.8	0.4	3.0	1.2	4.6
DieselCar	30426.5	101.4	2.4	7.3	1.6	11.3	2.1	2.9	1.2	6.2
PetrolLgv	492.7	0.7	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
DieselLgv	13067.2	43.7	1.4	3.7	0.8	5.9	1.3	1.5	0.6	3.3
LTBus	10384.0	59.9	0.4	2.0	0.2	2.7	0.4	0.8	0.2	1.3
Coach	3678.5	26.4	0.2	0.5	0.1	0.8	0.2	0.2	0.0	0.4
Rigid	9200.0	52.3	0.4	2.7	0.3	3.4	0.3	1.1	0.2	1.6
Artic	2083.9	8.9	0.1	0.3	0.1	0.5	0.1	0.1	0.1	0.2
Totals	112310.7	333.8	6.3	25.5	5.2	37.0	5.6	10.2	3.6	19.4

Greater London

Mode	CO2	NOx	PM10 Exhaust	PM10 Brake	PM10 Tyre	PM10_Total	PM25 Exhaust	PM25 Brake	PM25 Tyre	PM25_Total
Motorcycle	75041.6	76.3	6.8	12.9	2.6	22.3	5.7	5.1	1.8	12.6
Taxi	224070.8	786.0	40.0	33.5	7.9	81.5	36.0	13.3	5.5	54.8
PetrolCar	2150973.3	1316.6	28.6	458.3	110.0	596.9	23.9	182.4	77.0	283.2
DieselCar	1856128.5	6192.4	144.9	440.3	105.6	690.8	130.1	175.2	73.9	379.3
PetrolLgv	24458.4	41.4	0.2	5.6	1.4	7.1	0.2	2.2	1.0	3.3
DieselLgv	668815.4	2266.4	72.5	180.6	44.0	297.1	65.1	71.9	30.8	167.8

LtBus	441836.2	2464.9	17.1	90.8	9.9	117.8	15.4	36.1	6.9	58.4
Coach	155635.6	1078.9	9.3	22.7	2.5	34.5	8.4	9.0	1.7	19.1
Rigid	583248.2	2955.6	21.2	152.7	20.7	194.7	19.0	60.8	14.5	94.3
Artic	288525.2	869.1	7.1	31.7	11.6	50.5	6.4	12.6	8.1	27.2
Totals	6468733.1	18047.6	347.9	1429.1	316.0	2093.1	310.1	568.7	221.2	1100.1

Appendix 3

Permit pricing based on engine size/ CO2 emissions for Islington Council

Band	Pre-2001 (cc)	Post-2001 (CO2g/km)	12 months	6 months	3 months	1 month
A	Electric	0-100	Free	Free	Free	Free
B	1-900	101-110	£15.50	£7.75	£5.75	£5.75
C	901-1100	111-120	£28	£14	£7	£5.75
D	1101-1200	121-130	£74	£37	£18.50	£6.25
E	1201-1300	131-140	£90	£45	£22.50	£7.50
F	1301-1399	141-150	£97	£48.50	£24.25	£8.25
G	1400-1500	151-165	£121	£60.50	£30.25	£10
H	1501-1650	166-175	£139	£69.50	£34.75	£11.50
I	1651-1850	176-185	£163	£81.50	£40.75	£14
J	1851-2100	186-200	£206	£103	£51.50	£17.50
K	2101-2500	201-225	£240	£120	£60	£20
L	2501-2750	226-255	£336	£168	£84	£28
M	2751 and above	256 and above	£434	£217	£108.50	£36.50

Appendix 4

Department for Transport statistics

[Vehicle Licensing Statistics \(https://www.gov.uk/government/collections/vehicles-statistics\)](https://www.gov.uk/government/collections/vehicles-statistics)

Table VEH0206
Licensed cars by CO2 emission band¹, Great Britain,
annually: 2001 to 2013

Year	1 - 100 g/km	101 - 110 g/km	111 - 120 g/km	121 - 130 g/km	131 - 140 g/km	141 - 150 g/km	151 - 165 g/km	166 - 175 g/km	176- 185 g/km	186- 200 g/km	201 - 225 g/km
Thousands											
2001	0.2	-	14.0	21.4	183.9	297.4	519.4	236.0	188.7	242.5	199.0
2002	0.3	4.4	55.2	50.6	453.5	643.5	1,129.6	502.2	387.7	495.3	411.0
2003	0.4	10.6	118.6	91.5	698.7	1,083.2	1,645.9	734.1	594.4	711.3	623.0
2004	0.4	18.6	186.6	169.2	932.5	1,523.5	2,188.5	950.7	802.5	899.0	811.0
2005	0.4	34.3	242.5	267.9	1,167.3	1,888.3	2,756.8	1,146.0	998.8	1,096.5	981.0
2006	0.4	75.3	301.9	368.9	1,396.9	2,187.8	3,261.2	1,363.2	1,136.1	1,252.8	1,123.0
2007	0.4	128.4	374.7	478.6	1,737.1	2,453.0	3,752.3	1,582.5	1,274.6	1,425.3	1,231.0
2008	3.7	198.3	519.7	582.9	2,100.2	2,710.3	4,143.0	1,757.7	1,385.8	1,559.5	1,291.0
2009	21.5	305.2	780.5	717.6	2,454.2	2,929.5	4,448.8	1,853.0	1,479.1	1,633.5	1,331.0
2010	57.0	439.2	1,091.0	957.8	2,776.1	3,094.7	4,666.4	1,901.5	1,537.8	1,671.9	1,341.0
2011	128.8	631.4	1,386.6	1,229.6	3,062.3	3,229.9	4,781.4	1,930.1	1,556.4	1,671.4	1,321.0
2012	297.6	840.1	1,715.5	1,584.4	3,322.1	3,341.5	4,808.1	1,935.5	1,541.8	1,659.9	1,291.0
2013	612.0	1,101.6	2,115.6	1,924.2	3,533.8	3,413.2	4,774.8	1,920.0	1,507.8	1,617.0	1,241.0
Percentage											
2001	-	-	0.1	0.1	0.7	1.2	2.1	0.9	0.8	1.0	0.8

2002	-	-	0.2	0.2	1.8	2.5	4.4	1.9	1.5	1.9
2003	-	-	0.5	0.3	2.7	4.1	6.3	2.8	2.3	2.7
2004	-	0.1	0.7	0.6	3.5	5.6	8.1	3.5	3.0	3.3
2005	-	0.1	0.9	1.0	4.2	6.9	10.0	4.2	3.6	4.0
2006	-	0.3	1.1	1.3	5.1	7.9	11.8	4.9	4.1	4.5
2007	-	0.5	1.3	1.7	6.2	8.8	13.4	5.7	4.6	5.1
2008	-	0.7	1.8	2.1	7.5	9.6	14.7	6.2	4.9	5.5
2009	0.1	1.1	2.8	2.5	8.7	10.4	15.7	6.6	5.2	5.8
2010	0.2	1.5	3.8	3.4	9.8	10.9	16.4	6.7	5.4	5.9
2011	0.5	2.2	4.9	4.3	10.8	11.3	16.8	6.8	5.5	5.9
2012	1.0	2.9	6.0	5.5	11.6	11.6	16.7	6.7	5.4	5.8
2013	2.1	3.8	7.3	6.6	12.1	11.7	16.4	6.6	5.2	5.5

1. Percentages exclude vehicles with unknown CO2 emissions

LBHF Equality Impact Analysis Tool

Overall Information	Details of Full Equality Impact Analysis
Financial Year and Quarter	Financial year 2015/16, quarter 4
Name and details of policy, strategy, function, project, activity, or programme	<p>Title of EIA: Emission linked parking permit report Short summary: A review of the existing parking permit structure and the recommendation for the implementation of a emission linked permit structure and diesel vehicle surcharge</p> <p>Note: If your proposed strategy will require you to assess impact on staff, please consult your HR Relationship Manager.</p>
Lead Officer	<p>Name: Edward Stubbing Position: Transport Planner Email: edward.stubbing@lbhf.gov.uk Telephone No: 020 8753 4651</p>
Date of completion of final EIA	6 / 11 / 2015

Section 02	Scoping of Full EIA								
Plan for completion	<p>Timing: launch in April 2016 Resources: Parking Services, Pay & Park, Communications</p>								
Analyse the impact of the policy, strategy, function, project, activity, or programme	<p>Analyse the impact of the policy on the protected characteristics (including where people / groups may appear in more than one protected characteristic). You should use this to determine whether the policy will have a positive, neutral or negative impact on equality, giving due regard to relevance and proportionality.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Protected characteristic</th> <th style="width: 60%;">Analysis</th> <th style="width: 15%;">Impact: Positive, Negative, Neutral</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Protected characteristic	Analysis	Impact: Positive, Negative, Neutral			
Protected characteristic	Analysis	Impact: Positive, Negative, Neutral							

Age	none	neutral
Disability	none	neutral
Gender reassignment	none	neutral
Marriage and Civil Partnership	none	neutral
Pregnancy and maternity	none	neutral
Race	none	neutral
Religion/belief (including non-belief)	none	neutral
Sex	none	neutral
Sexual Orientation	none	neutral

Human Rights or Children’s Rights

If your decision has the potential to affect Human Rights or Children’s Rights, please contact your Equality Lead for advice

Will it affect Human Rights, as defined by the Human Rights Act 1998?

No

Will it affect Children’s Rights, as defined by the UNCRC (1992)?

No

Section 03	Analysis of relevant data Examples of data can range from census data to customer satisfaction surveys. Data should involve specialist data and information and where possible, be disaggregated by different equality strands.
Documents and data reviewed	council records and DfT statistics
New research	If new research is required, please complete this section

Section 04	Consultation
Consultation	Details of consultation findings (if consultation is required. If not, please move to section 06)
Analysis of consultation outcomes	

Section 05	Analysis of impact and outcomes
Analysis	What has your consultation (if undertaken) and analysis of data shown? You will need to make an informed assessment about the actual or likely impact that the policy, proposal or service will have on each of the protected characteristic groups by using the information you have gathered. The weight given to each protected characteristic should be proportionate to the relevant policy (see guidance).

Section 06	Reducing any adverse impacts and recommendations
Outcome of Analysis	no specific actions are recommended as a result of analysis

Section 07	Action Plan
-------------------	--------------------

Action Plan	Note: You will only need to use this section if you have identified actions as a result of your analysis					
	Issue identified	Action (s) to be taken	When	Lead officer and borough	Expected outcome	Date added to business/service plan

Section 08	Agreement, publication and monitoring
Chief Officers' sign-off	Name: Nick Boyle Position: Chief Transport Officer Email: nick.boyle@lbhf.gov.uk Telephone No: 020 8753 3069
Key Decision Report (if relevant)	Date of report to Cabinet: 11 / 01 / 2016 Key equalities issues have been included: No
Opportunities Manager (where involved)	Name: Position: Date advice / guidance given: Email: Telephone No: