

## Equality Analysis

### Air quality improvements measures: electric vehicle charging infrastructure

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#### Screening Data

1. What are the objectives and expected outcomes of your proposal? Why is it needed? Make sure you highlight any proposed changes.

The Brent Long Term Transport Strategy 2015 – 2035 (LTTS), Planning Policy Guidance, the London Plan, Brent Development Management Policies and the draft Mayor's Transport Strategy, all seek improvements in air quality. Public and political awareness of the health impacts of poor air quality is also growing rapidly and the Mayor of London has highlighted the urgent need for new measures to tackle poor air quality across London.

The majority of Brent is already within an Air Quality Management Area due to high levels of nitrogen dioxide and particulate matter which are known to be a contributory factor to poor health. Petrol and diesel vehicles are behind a large proportion of emissions of these pollutants. Electric vehicles, which produce no exhaust emissions to air, are therefore a key part of the solution and are increasingly prevalent in the fleets of vehicle manufacturers.

A robust network of electric vehicle charge points is consequently vital to ensuring that electric vehicle ownership in Brent can proliferate. Policy 6 of the draft Mayor's Transport Strategy (MTS) specifically focuses on the provision of infrastructure to support and allow the take up of ultra-low and ZEC vehicles. Proposal 77 makes direct reference to the potential for using electric vehicles for delivery purposes.

In 2016, Brent Council entered into a new contract with BluePoint London to install electric vehicle charge points as part of the Source London network. Source London charge points are predominantly located at, or close to, popular destinations and are therefore considered to have the primary purpose of providing a top-up charge. At present, proposals for 24 locations with 32 active charge points and associated electric vehicle only parking bays have been developed and are being consulted on. It is likely that these charge points will be active in Brent later in 2017.

On-street charge points for residents without access to off-street parking are needed to allow residents to charge their vehicles overnight close to their homes. Additionally, charging facilities are required for those employed in the taxi and private hire vehicle (PHV) trades, and other small businesses as the Mayor of London's Taxi and Private Hire Action Plan 2016 requires that from 2018 and 2020 onwards respectively, all taxis and PHVs licensed for the first time are zero emission capable (ZEC). In order to be able to recharge quickly during the working day, ZEC taxis and PHVs require rapid charge points.

Brent is set to benefit from two separate, but interlinked workstreams that have received funding from the Office for Low Emission Vehicle's Go Ultra Low City Scheme (GULCS) in which London Councils, Transport for London (TfL), and the Greater London Authority (GLA) were awarded £13million:

- 1) Rapid charging infrastructure project; and
- 2) On-street residential electric vehicle charge points.

#### 1) Rapid charging infrastructure project

Rapid charge points are capable of charging an electric vehicle at powers of up to 50kW to deliver an 80% charge in 30 minutes. They are designed to provide a top-up charge to fleet

vehicles, taxis and PHV during the course of a day. Brent has worked with TfL to identify suitable locations that are close to key routes, town centres, and other destinations with the aim of delivering at least ten rapid charge points in the borough.

## 2) On-street residential electric vehicle charge points

This will be in the form of lamp column charge points with no designated parking bays alongside to avoid the removal of parking spaces in residential roads where there is high parking pressure. However, three charge points will be installed per street per resident request. These will be concentrated in the Queens Park and Kilburn areas as the highest concentration of requests to date have been from residents in these areas.

At the end of March 2017 vehicle licensing records showed that there were 335 plug-in vehicles registered to keepers in Brent. In 2011, 43.0 per cent of Brent households had no access to a car or van whilst 39.5 per cent had access to one car or van. A further 13.5 per cent had access to two cars or vans and 3.1 per cent to three cars or vans. Only 0.9 per cent of households had access to four or more cars or vans. When compared to London as a whole, a lower proportion of Brent households had access to a car or van in 2011. In spite of this, over half of all Brent households had access to a car or van indicating the need for infrastructure to support electric vehicle charging for those who already own an electric vehicle as well as those who may purchase or have access to one in the future.

Informal and statutory consultation for rapid charge points will be undertaken. Lamp column electric vehicle charge points will not require statutory consultation as the location of lamp column charge points will be based on requests received from residents who own electric vehicles and are therefore likely to be concentrated in the Queens Park and Kilburn areas. However, local residents will be informed of proposals which will give people the opportunity to comment after which an assessment of any particular impacts on people with affected protected characteristics will be undertaken and addressed. All relevant responses received will be considered as part of the scheme to be delivered. As yet, there is no evidence to suggest that the implementation of charge points will have an adverse impact on any of the equality groups listed.

Sources:

- Draft Mayor's Transport Strategy (2016)
- Department for Transport; Table VEH0131 – plug-in cars and vans licensed by location of registered keeper
- ONS Census 2011; Table QS416EW – car or van availability

## 2. Who is affected by the proposal? Consider residents, staff and external stakeholders.

Provision of electric vehicle charge points will have the greatest benefit to all who own or drive an electric vehicle as well as those who are passengers or rely on services provided by an electric vehicle. Rapid charge points are designed to provide a top-up charge and so are aimed primarily at taxi and PHV drivers as well as freight vehicles although can be used by anyone with an electric vehicle including residents. Lamp column charge points are largely aimed at residents who wish to charge their vehicle overnight. There will be limited impact on the existing residential parking available.

Electric vehicle charging infrastructure will not only benefit those who live, work and study in Brent, but also anyone who wishes or needs to access a charge point.

### 3.1. Could the proposal impact on people in different ways because of their equality characteristics?

- Yes

Research for the Department for Transport (DfT) and TfL has highlighted that electric vehicle owners tend to have certain demographic characteristics with regards to age, sex and/or socio-economic background – they are largely male and aged between 40 and 69 years. Those that have these characteristics are more likely to own an electric vehicle and thus be impacted by this proposal.

Similarly, research by the Policy Exchange has shown that taxi and PHV drivers are likely to be of a diverse ethnic background and so those with these characteristics in this occupation are more likely to benefit.

If you answered 'Yes' please indicate which equality characteristic(s) are impacted

- Age
- Race
- Sex

3.2. Could the proposal have a disproportionate impact on some equality groups?

- Yes

If you answered 'Yes', please indicate which equality characteristic(s) are disproportionately impacted

- Age
- Race
- Sex

Provision of electric vehicle charging infrastructure will benefit those who already own an electric vehicle or have characteristics which are most associated with electric vehicle owners and/or taxi and PHV drivers. For example, the diversity profile of current electric vehicle owners largely comprises white men between 40 and 69 years. Taxi and PHV drivers are predominantly male. Research undertaken by Policy Exchange using the Labour Force Survey (LFS) has revealed that taxi (and chauffeur) driving is the most diverse occupation in England & Wales. Over 46 per cent identify themselves as white British with nearly one quarter identifying themselves as Pakistani.

3.3. Would the proposal change or remove services used by vulnerable groups of people?

- No

Provision of electric vehicle charging infrastructure across the borough would not change or remove services used by vulnerable groups of people. All locations proposed to have a rapid charge point will be subject to informal and statutory consultation prior to implementation which will identify any outstanding barriers for groups with protected characteristics as well as vulnerable groups of people and ways in which these can be addressed. Lamp column electric vehicle charge points will not require statutory consultation although local residents will be informed of proposals.

3.4. Does the proposal relate to an area with known inequalities?

- Yes

TfL wish to install at least ten rapid charge points in Brent distributed across the borough and lamp post charge points would be concentrated largely in the Queens Park and Kilburn areas. There is considerable variation in equality across Brent and the borough as a whole ranks 39<sup>th</sup> out of all English local authorities in terms of deprivation.

3.5. Is the proposal likely to be sensitive or important for some people because of their equality characteristics?

- Yes

If you answered 'Yes', please indicate which equality characteristic(s) are impacted

- Age
- Race
- Sex

Provision of electric vehicle charging infrastructure will be borough-wide and is likely to be important for those who already own an electric vehicle or have characteristics associated with these owners indicating potential future ownership. Similarly the proposal will be important for those who have characteristics associated with taxi and PHV drivers.

### 3.6 Does the proposal relate to one of Brent's equality objectives?

- Yes

To know and understand our communities.

To ensure that local public services are responsive to different needs and treat users with dignity and respect.

To develop and sustain a skilled and committed workforce able to meet the needs of all local people.

### Recommend this EA for Full Analysis?

Yes

### Comments

A mixture of qualitative and quantitative data was used to inform this EA including:

- Brent Joint Strategic Needs Assessment Deprivation (2015) – presentation
- Brook Lyndhurst, (2015), *Uptake of ultra low emission vehicles in the UK: a rapid evidence assessment for the Department for Transport*
- Future Thinking, (2015), *Understanding electric vehicles – research findings*
- Greater London Authority, (2017), *Interim 2015-based housing led population projections*
- Office for National Statistics (2012), *2011 Census*
- Office for National Statistics, (2016), *2015 mid-year population estimates*
- Policy Exchange, (2017), *The two sides of diversity – which are the most ethnically diverse occupations?*
- Transport for London (2017), *Electric vehicle charging infrastructure: location guidance for London*

## Impact Assessment Data

5. What effects could your policy have on different equality groups and on cohesion and good relations?

### 5.1 Age (select all that

- Positive

Based on research undertaken for the DfT, 23 per cent of electric vehicle owners in the UK were aged between 40 and 49 and a further 23 per cent between the ages of 60 and 69. Those aged 50 to 59 accounted for the largest group of owners at 29 per cent. This indicates that three quarters of electric vehicle owners were between the ages of 40 and 69.

Additional research by Future Thinking via interviews with electric vehicle owners in 2015 showed that 24 per cent were between the ages of 35 and 44. A further 23 per cent were between the ages of 45 and 54, and 20 per cent were aged between 55 and 64. This accounts for 67 per cent of owners being between the ages of 35 and 64.

Currently, some 32.8 per cent (at mid-year 2015) of Brent's population is aged between 40 and 69. This is projected to rise only slightly over the coming years to 34.0 per cent by 2025. If these trends of ownership continue, this implies that those who fall into these age categories are more likely to benefit from the provision of electric vehicle charging infrastructure in the borough as they are more likely to own or buy an electric vehicle. In addition anyone over the age of 17 (the legal age to drive in the UK) is also likely to benefit.

All locations proposed to have a rapid charge point will be subject to informal and statutory consultation prior to implementation. Lamp column electric vehicle charge points will not require statutory consultation although local residents will be informed of proposals.

#### Sources:

- ONS 2015 mid-year estimates
- GLA interim 2015-based housing led population projections
- Brook Lyndhurst, (2015), *Uptake of ultra low emission vehicles in the UK: a rapid evidence assessment for the Department for Transport*
- Future Thinking, (2015), *Understanding electric vehicles – research findings*

### 5.2 Disability (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively) from the proposals. However, the feedback from the transport and accessibility consultation with the Brent Disability Forum on 6 September informed the council that the clutter, the quality and design of pavements in Brent impedes accessibility for people with disabilities. The charging points design and installation should therefore be delivered with Blue Badge holders and disabled people in mind. Consultation will be undertaken for each rapid charge point prior to implementation to ensure accessibility and visibility on a case-by-case basis whilst residents will be kept informed of lamp column charge point proposals.

### 5.3 Gender identity and expression (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively). Notwithstanding this, consultation will be undertaken for each rapid charge point prior to implementation whilst residents will be kept informed of lamp column charge point proposals.

### 5.4 Marriage and civil partnership (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively). Notwithstanding this, consultation will be undertaken for each rapid charge point prior to implementation whilst residents will be kept informed of lamp column charge point proposals.

#### 5.5 Pregnancy and maternity (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively). Notwithstanding this, consultation will be undertaken for each rapid charge point prior to implementation to ensure easy access whilst residents will be kept informed of lamp column charge point proposals.

#### 5.6 Race (select all that apply)

- Positive

79 per cent of the electric vehicle users surveyed identified themselves as white suggesting that this ethnicity will benefit disproportionately from the provision of electric vehicle charging infrastructure. However, rapid charge points are aimed at taxi and PHV drivers who may need to top up their vehicles during their shifts and research undertaken by Policy Exchange using the Labour Force Survey (LFS) has revealed that taxi (and chauffeur) driving is the most diverse occupation in England & Wales. Over 46 per cent identify themselves as white British with nearly one quarter identifying themselves as Pakistani.

TfL's own guidance to locating infrastructure for electric vehicles contains maps showing that between 1,202 and 1,798 PHV drivers reside per postcode district in the south and north of the boroughs. Although the number of taxi drivers residing in Brent is much lower, peaking at between 66 and 128 drivers per postcode district, both are likely to cover a range of ethnicities. This is not only because taxi (and chauffeur) driving is the most diverse occupation but because Brent as a whole ranks as the second most diverse local authority in England & Wales in the most recent Census estimates using Simpson's Diversity Index. Dollis Hill ward in Brent ranked as the most diverse ward in England & Wales on the same basis with a further nine of Brent's wards featuring in the top 50 most diverse wards. Therefore, provision of electric charging infrastructure, particularly rapid charge points is likely to benefit all ethnicities.

All locations proposed to have a rapid charge point will be subject to informal and statutory consultation prior to implementation. Lamp column electric vehicle charge points will not require statutory consultation although local residents will be informed of proposals.

#### Sources:

- Future Thinking, (2015), *Understanding electric vehicles – research findings*
- Policy Exchange (2017), *The two sides of diversity: which are the most ethnically diverse occupations?*
- Transport for London (2017), *Electric vehicle charging infrastructure: location guidance for London*
- GLA Update CIS2012-04, 2011 Census Snapshot: Ethnic Diversity Indices
- GLA Update CIS2013-02, 2011 Census Snapshot: Ethnic Diversity Indices for wards

#### 5.7 Religion or belief (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively). Notwithstanding this, consultation will be undertaken for each rapid charge point prior to implementation whilst residents will be kept informed of lamp column charge point proposals.

## 5.8 Sex (select all that apply)

- Positive

Based on research undertaken on behalf of the DfT, 89 per cent of electric vehicle owners in the UK were male. This falls to 75 per cent based on surveys undertaken by Future Thinking. If this trend in ownership continues, men are more likely to benefit from the provision of electric vehicle charging infrastructure than women.

In Brent, 97.8 per cent of residents aged 16 and over in employment as 'taxi and cab drivers and chauffeurs' were male. Of those whose workplace was Brent, 97.8 per cent were also male. Men are therefore more likely to benefit from the provision of both rapid charge points as well as lamp column charge points in the borough.

All locations proposed to have a rapid charge point will be subject to informal and statutory consultation prior to implementation. Lamp column electric vehicle charge points will not require statutory consultation although local residents will be informed of proposals.

### Sources:

- Brook Lyndhurst, (2015), *Uptake of ultra low emission vehicles in the UK: a rapid evidence assessment for the Department for Transport*
- Future Thinking, (2015), *Understanding electric vehicles – research findings*
- ONS Census 2011; Tables CT0347 and CT0426 – sex by occupation

## 5.9 Sexual orientation (select all that apply)

- Neutral

There is no evidence to suggest that residents from this protected characteristic will be disproportionately affected (either positively or negatively). Notwithstanding this, consultation will be undertaken for each rapid charge point prior to implementation whilst residents will be kept informed of lamp column charge point proposals.

## 5.10 Other (Socio-economic characteristics)

- Positive

Levels of economic activity vary amongst Brent residents (in this instance those aged 16-74) from less than 62 per cent in Stonebridge ward to nearly 78 per cent in Queen's Park ward. Economic inactivity includes those who are retired, studying, looking after the family or home, as well as those who are sick or disabled.

Those who are economically active are more likely to benefit from the provision of electric vehicle charging infrastructure because of the direct link between usage/need for a charge point and employment as a taxi or PHV driver.

### Sources:

- ONS Census 2011; Table KS601EW to KS603EW – economic activity

6. Please provide a brief summary of any research or engagement initiatives that have been carried out to formulate your proposal.

What did you find out from consultation or data analysis?

Were the participants in any engagement initiatives representative of the people who will be affected by your proposal? How did your findings and the wider evidence base inform the proposal?

TfL has commissioned a number of studies to determine the requirements regarding electric vehicle charge points for both taxis and the private hire trade, as well as for residential use. These studies engaged with electric vehicle owners as well as taxi and PHV drivers. This research has been used by TfL in developing strategies related to electric vehicle charging

infrastructure and is used here to inform this Equality Analysis.

Brent Council has worked closely with TfL to identify potential locations for rapid charge points. TfL has taken these locations forward via their site assessment and design process which includes a desktop assessment, outline design, power and topographic surveys, and concept design to determine the feasibility of each location.

In addition to the feedback from Brent Disability Forum, Brent Council will consult with residents and stakeholders regarding the location of each proposed rapid charge point prior to implementation. As part of this consultation process, Brent Council will collect data on those who complete any survey questionnaires to determine whether respondents are representative of those who will be affected by the proposals.

The location of lamp column charge points will be largely based on requests received from residents who own electric vehicles and are therefore likely to be concentrated in the Queens Park and Kilburn areas. Statutory consultation is not necessary but engagement with residents will take place.

7. Could any of the impacts you have identified be unlawful under the Equality Act 2010?

- No

8. What actions will you take to enhance any potential positive impacts that you have identified?

All proposed electric vehicle charging infrastructure will be provided and located in accordance with existing design standards which have been developed to meet the requirements of people with a range of disabilities (both physical and non-physical) and long-term health conditions (e.g. dementia).

Brent Council will continue to publicise improvements made to reduce or remove barriers to equality and will raise awareness of any outstanding equality issues within the community. It will also ensure that any communication and consultation initiatives are accessible and inclusive of all protected groups, including people with learning disabilities, deaf and blind (as well as deaf blind) residents, people with dementia and their carers, as well as children, young people and older people.

9. What actions will you take to remove or reduce any potential negative impacts that you have identified?

There are no negative impacts of the provision of electric vehicle charging infrastructure identified by the equality analysis at this stage. However consultation will be undertaken for each rapid charge point prior to implementation to ensure that any potential negative impacts are reduced or removed whilst residents will be kept informed of lamp column charge point proposals.

10. Please explain the justification for any remaining negative impacts.

The provision of rapid charge points does not have any outstanding identified negative impacts.