

	Cabinet 27 July 2026
	Report from the Corporate Director of Neighbourhoods & Regeneration
	Lead Member - Cabinet Member for Cleaner Streets, Transport and Public Realm (Councillor Promise Knight)
Authority to Undertake a Trial of a Cross-Pavement Charging Solution for Electric Vehicles on the Public Highway	
Wards Affected:	All
Key or Non-Key Decision:	Key
Open or Part/Fully Exempt: (If exempt, please highlight relevant paragraph of Part 1, Schedule 12A of 1972 Local Government Act)	Open
List of Appendices:	None
Background Papers:	None
Contact Officer(s): (Name, Title, Contact Details)	Annekatriin Dennemann, Principal Transport Planner, Spatial Planning 020 8937 3553 Annekatriin.Dennemann@brent.gov.uk

1.0 Executive Summary

- 1.1 Cross-pavement charging solutions (XPS) present an opportunity for residents without access to off-street parking to charge an electric vehicle (EV) on-street using their domestic electricity supply. This provides users with the twin advantages of convenient and cost-effective charging. This report sets out details of a proposed limited trial of XPS in Brent which, if successful, could be rolled-out to other parts of the borough.

2.0 Recommendation(s)

For Cabinet to approve:

- 2.1 Undertaking a limited trial of electric vehicle pavement channels, to enable the Council to gauge the suitability of the technology and to establish suitable criteria/processes for possible wider deployment across Brent.

2.2 The budget for the project, including all relevant costs as set out in the report.

3.0 Detail

3.1 Cabinet Member Foreword

- 3.1.1 Among the Council's main transport and environmental commitments is to mitigate the impact of traffic, improve air quality and to encourage more sustainable travel in Brent. A key priority in this regard is to facilitate the uptake of electric and other zero emission vehicles. Recognising that many residents do not have access to off-street parking, the Council has made great strides in recent years to develop an extensive network of on-street EV charge-points – with more planned over the coming years.
- 3.1.2 Despite this, a major barrier to the up-take of EVs is the cost disparity between public on-street and private home charging – with the former often more expensive than the equivalent cost of charging from home. At a time when many residents are facing a continued cost of living squeeze, our aim is to address this barrier by providing those without access to off-street parking with the means to charge cheaply and safely from home using cross pavement charging solutions. This, in turn, will enable us to create a less polluted, more sustainable borough.
- 3.1.3 One of the Borough Plan five specific priorities is to build 'A cleaner, greener future'. Further expansion of the borough's EV charging infrastructure to support the continued transition from petrol and diesel vehicles to EVs will help achieve this.
- 3.1.4 The Brent Long Term Transport Strategy Review 2022 details a range of measures and interventions aimed at helping to mitigate the impact of traffic and facilitate healthy, sustainable travel in Brent – with a priority being to facilitate the uptake of electric and other zero emission vehicles. Brent's Electric Vehicle Charging Infrastructure Plan 2022-2041 was developed in support to bring about a step change in the provision of publicly available EV charging facilities.
- 3.1.5 Fuel use and emissions from road transport is one of the key sources of CO2 emissions in Brent, representing 22% of the borough's territorial carbon dioxide emissions. The Brent Climate and Ecological Emergency Strategy 2021-2030 set out in key theme 2, Transport, that petrol and diesel road journeys will have at least halved by 2030 whilst residents' journeys by walking, cycling or public transport should have increased. Many of Brent's drivers have already changed from a petrol or diesel car or van to an electric vehicle.

3.2 Background

- 3.2.1 Brent residents currently have access to an extensive network of around 1,000 on-street EV chargepoints in operation across the borough - installed, operated and maintained by various chargepoint operators (CPOs). Work is ongoing to further expand the borough's EV infrastructure, including through the

Government's Local Electric Vehicle Infrastructure (LEVI) scheme, as a means of helping Brent's residents make the switch from petrol and diesel cars and vans to EVs.

- 3.2.2 Whilst the number of EVs on Brent's streets has been steadily growing over recent years – influenced, in part, by the Government's Zero Emission Vehicle (ZEV) mandate which will see the phasing out of sales of new petrol and diesel vehicles by 2035, one of the barriers to further uptake is the cost of on-street charging in comparison to the cost of charging from home. A key factor in this is the Value Added Tax (VAT) differential, with energy drawn from public chargepoints being subject to 20% VAT, whereas EV drivers with access to off-street parking and able to charge via their home energy supply are charged 5% VAT.
- 3.2.3 In recent years cross-pavement charging solutions have begun to enter the EV infrastructure market offering EV drivers, particularly those without access to off-street parking, a new way to charge vehicles. Primarily, these solutions allow users to access their home electricity supply for EV charging on-street, which can be cheaper and more convenient than depending solely on public chargepoints. Additionally, when properly installed, they help reduce safety risks associated with trailing or unsecured charging cables across the footway.
- 3.2.4 In 2020 Brent entered an agreement with Trojan Energy to trial their 'flat and flush' charging solution in several Brent streets. One of the variants trialled was Trojan AON, which involved the installation of EV chargepoints in the footway, which were then connected to the residents' domestic electricity supply via an underground cable, enabling them to charge their vehicles on-street at a much lower cost. Although limited in scope, the trial was successful and proved popular with users and the majority of these chargepoints remain operational. Discussions with Trojan Energy were held around expanding the trial, but following the company's take-over by another chargepoint operator, it is unclear at this stage if this model will be continued in the longer-term.
- 3.2.5 In March 2026, the Council was successful in securing grant funding for the sum of £169,000 from the Department of Transport (DfT) to undertake a trial of electric vehicle pavement channels. The trial will enable the Council to gauge the suitability of the technology and to establish suitable criteria and processes for possible wider deployment across Brent. Details of how the trial will work are set out below.

3.3 Trial Details

Purpose and Scope

- 3.3.1 The aim of the trial is for the Council to assess if pavement channels are a suitable solution for charging EVs on street and to determine if they should form part of Brent's wider EV charging infrastructure offer. Since cross-pavement charging solutions (XPS) will not be suitable for every household, they are not seen as a replacement for public EV charging but will instead complement it – helping more people make the switch to EVs. The Government is clear that the

roll-out of public charging should not be delayed due to XPS roll-out and see pavement channels as a complementary charging solution limited to specific locations and use cases.

- 3.3.2 Brent has been allocated grant funding totalling £169,000 towards the capital costs of installing pavement charging channels. The per unit funding contribution for these channels is capped at £1,200, meaning the funding allocation would support the rollout of 141 channels. However, it is proposed that initially the trial be limited to 60 locations to test the viability of the charging solution itself and to hone the various application, installation and management processes that will need to be set up.
- 3.3.3 The trial will run for 12 months and will be closely monitored. An initial review will be undertaken after six months, with data and feedback collected from trial participants, suppliers and other key stakeholders used to inform any changes to the trial that may be required. A full review of the trial will be undertaken after 12 months and a monitoring report published. At this stage, and in accordance with the requirements of the Constitution, a recommendation will be made to either:
- a) expand the trial (utilising the remaining grant funding);
 - b) roll out pavement channels more widely; or
 - c) close the programme.

Rationale for approach

- 3.3.4 It is proposed to undertake a limited trial over a defined timeframe to allow the Council to gather information and insights before making longer term decisions on future support for XPS. This approach will enable the Council to test and refine its offer/processes and reduce the level and impact of risk to residents and the authority.

Site Selection and Trial Participation

- 3.3.5 Ahead of the launch of the trial, Brent residents are currently being invited to register their interest in taking part in the trial via the Council's website [Electric Vehicle Charging | Brent Council](#). Residents are advised that registering interest does not guarantee that a charging channel will be installed at their property and will be subject to further assessment. To date, around 80 people have registered interest in participating in the trial.
- 3.3.6 As a next stage, residents will be provided with more detailed information regarding conditions for participation in the trial, including the criteria, arrangements, timescales and costs for the supply, installation, operation and ongoing maintenance of the charging channel and, where required, the home chargepoint. At this stage, residents will be able to make a more informed decisions as to whether they wish to participate in the trial.

3.3.7 Work is currently underway to define the criteria that will be used to determine whether a resident/property is suitable for inclusion in the trial. Key criteria that will likely determine whether a pavement channel can be installed at a property include:

- No existing off-street parking;
- Footway width and composition (XPS are generally not suitable to be installed across very wide footways or grass verges);
- The proximity of utilities and street furniture, in particular lamp columns and utility cabinets, and other metal objects, which could pose a '[dual touch](#)' risk;
- The proximity of street trees – with the need to avoid damaging tree roots;
- Whether other kerbside interventions are planned at that location (including, but not limited to, on-street public charging infrastructure; cycle parking and other active travel infrastructure/improvements; tree planting and other environmental measures (e.g. Rain Gardens, SUDS, etc.).

3.3.8 Other qualifying criteria are likely to include the need for residents to either own, or be in the process of purchasing, an EV. A key focus for the trial will be existing blue badge holders – many of whom struggle to access existing on-street public charging infrastructure.

Ownership

3.3.9 Some XPS suppliers offer end-to-end management solutions, including directly handling resident applications, installation, and ongoing maintenance. This can result in more efficient handling of the various processes and potentially offer cost savings to the resident. This approach has the benefit of reducing the Council's costs and responsibilities but also limits the level of control it has over how the infrastructure is installed and managed, as well as potential negative impacts from any issues that may arise with the supplier (e.g. financial instability, poor service, high costs, etc.).

3.3.10 The Council will process the initial resident applications, for which a £100 non-refundable application fee will be payable to the Council. For the trial, officers in the Transportation Planning team will undertake the site assessment to determine which locations are suitable for inclusion. To reduce the Council's ongoing operational involvement, it is proposed to defer to the expertise of suppliers on the installation, maintenance and operation of their own product. It is proposed that the supplier of the XPS retains ownership of the solution. The benefits of this approach include:

- Suppliers have greatest level of subject matter expertise, reducing need for the Council to upskill in-house resource;
- Suppliers have greatest understanding of their own product.

- Supplier may be able to offer point of contact to respond to queries from residents.
- Lower exposure to risk, although some liability ultimately still falls to the local highway authority, i.e. the Council, who remains responsible for the highway.
- Supplier is responsible for maintenance.

3.3.11 Additional considerations that will need to be explored as part of the trial include:

- Any difficulties in integrating XPS into wider highways services and assets.
- The share of liabilities between the supplier and the highways authority requires agreement.
- Ownership of assets may need to be transferred in future.
- Requirement to manage ongoing relationship with supplier.
- Planning Permission and Section 50 street works licences requirement can increase costs and timeframes for deployment.

Liability and Insurance

3.3.12 The type of ownership is a key factor in liability and therefore the level of insurance required by each party. The Highway Authority is under a non-delegable statutory duty to maintain highways under the Highways Act 1980. The main insurance considerations are outlined below:

Public liability insurance:

- Should be held by the owner of the XPS device. If this is, as proposed, the supplier, it will cover against injury and accidental damage caused by a fault in the XPS equipment, e.g. a cable channel becoming unseated from a pavement.
- Benchmarking with other local authorities will inform the Council's decision on the level of indemnity required by the owner of the XPS device.
- The Council's public liabilities associated with XPS may already be adequately covered by an existing insurance policy.

Indemnity insurance:

- Held by the user of the XPS device as required within their user agreement.
- Covers the user and the local authority against injury and accidental damage caused by non-criminal misuse of the XPS, e.g. not fitting a charging cable correctly into a cable channel.
- In some cases, some or all elements of this type of insurance cover may be provided by the user's existing home and/or car insurance policy but the level of such insurance cover may fall short of the claim level that the Council's insurance could cover and whether EV charging related claims would be included. This should be evidenced through the trial participant's current policy documents.

Planning Consent

3.3.13 A key component of the delivery process of cross-pavement charging solutions (XPS), and EV infrastructure more generally, is gaining appropriate planning permissions. In the context of XPS, the need for planning permission to be granted prior to installation can vary depending on a number of factors. Planning permission is required for certain types of development, this currently includes some forms of XPS and the associated chargepoints that are installed alongside the XPS. The need for planning permission depends on who is installing, where the installation will be located, and whether part or all of the installation is considered a permitted development under national planning law – meaning that planning permission would not be required.

3.3.14 As planning consents apply differently to private chargepoints and assets in the public realm, it is important to distinguish between:

- a. The XPS itself – the pavement channels that are permanently placed on or over the public highway.
- b. The private domestic chargepoint – typically installed at the resident's property.

3.3.15 However, by taking a more active role in the delivery of XPS, local authorities may be able to remove the need for planning permission to install XPS in the public highway through the works falling within “permitted development” under the Town and Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 12. This sets out permitted development rights for *“the erection or construction and the maintenance, improvement or other alteration by or on behalf of a local authority [...] of [...] electric vehicle charging points and any associated infrastructure”*.

3.3.16 It is important to note that “electric vehicle charging points and any associated infrastructure” are listed as a single item within this permitted development (as opposed to two separate items. Local authorities should therefore consider whether this permitted development is applicable where the XPS and

associated EV chargepoint are two separate devices, installed by two different installers. A common component of both of these approaches to delivering XPS is that the local authority (or parties acting on its behalf) must conduct the installation.

3.3.17 Permitted development rights under Schedule 2, Part 2, Class D of GPDO set out the requirement for the installation, alteration or replacement of an electrical outlet mounted on a wall for recharging electric vehicles to be set within an area lawfully used for off-street parking. Electric vehicles that are parked on street and would charge via a cable fed through pavement channel in the public highway and connected to a domestic EV chargepoint would therefore fall outside of the remit of permitted development so that applying residents would be required to apply for planning permission for the domestic EV chargepoint.

3.2.18 Where XPS is installed by a supplier that is not acting directly on behalf of the local authority (e.g. they are acting on behalf of a resident who has requested XPS), the installation is likely to be classed as a “development” under the [Town and Country Planning Act 1990, Part III, Section 55](#), and therefore require planning permission to be granted by the local authority prior to installation.

Installation

3.3.19 The Highways Act 1980, Part V, Section 62 states that highways authorities “*may carry out, in relation to a highway maintainable at the public expense by them, any work (including the provision of equipment) for the improvement of the highway*”. If the local authority considers XPS to be a “highways improvement”, they may choose to apply the powers conferred on them by this legislation to conduct the installation.

3.3.20 It is proposed that the supplier (or subcontractor) who are familiar with the solution installs the XPS after they obtain the necessary permissions from the Council. The supplier’s installers are likely to have experience of fitting a given XPS in different types of location and different types of property. No additional resource or upskilling would be required from the Council’s highway maintenance contractors.

3.3.21 Under this approach, planning permission would therefore be required for XPS equipment as well as for the domestic chargepoint installed within the front of the property. In addition, the XPS supplier (or their civils subcontractor) must apply for a streetworks licence. This could increase delivery time and potentially cost.

Maintenance

3.3.22 In the interest of limiting on-going maintenance pressure on the Council, simplifying the maintenance process for both the Council and residents as well as removing liability for maintenance from the Council, it is proposed that the supplier will be responsible for the long-term maintenance of the XPS. By placing the responsibility for upkeep with the supplier, who should have commercial interest in ensuring consistent, adequate standard of upkeep, the resource required from the Council to coordinate maintenance will be

minimised. However, this approach also places limitation on the Council's ability to control the standard of maintenance and upkeep of the cross-pavement channel. This should be addressed by placing a contractual obligation on the supplier for essential and structural maintenance of the channel.

- 3.3.23 It is proposed that the resident would remain responsible for routine maintenance, such as removal of any debris. This may require contractual obligation to be placed on the resident outlining their responsibilities to carry out day-to-day upkeep.

Step by Step Trial Process and Cost Recovery

- 3.3.24 The following process sequence is recommended (subject to contractual agreement with cross-pavement channel provider):

1. Council registers resident's expression of interest in taking part in the trial (currently under way).
2. Council procures a suitable cross-pavement charging channel provider and tasks them to deliver, an initial trial of 60 cross-pavement channels at locations on the public highway across the borough. This will include installation, ownership, operation and on-going maintenance of the channels.
3. Council undertakes site assessment (criteria tbc). A non-refundable application fee applies to residents who are eligible for participation in the trial. (This is the approach for the trial. If the XPS was to be rolled out more widely across the borough following the trial, then residents would be required to formally apply for a cross-paving channel).
4. Where site conditions are favourable the Council provides conditional approval to the resident for a pavement channel on condition that:
 - a. the resident receives planning consent for installation of a charge point and the charging channel (application fees apply).
 - b. the resident commits to installing a charge point, for example through a user agreement.
5. Supplier provides residents with cost estimates for supply, installation and on-going maintenance for cross-pavement channel.
6. Residents apply, where necessary, to the Council for planning consent for installation of charge point and the cross-pavement channel. (application fee applicable).
7. Residents apply for home charge point grant funding from OZEV with evidence that they have conditional Council approval for a pavement channel (optional).

8. Residents receive conditional approval for home charge point grant.
9. Residents sign-up to agreement with supplier for supply, installation, operation and on-going maintenance of pavement channel.
10. Supplier applies to the Council for consent and a licence to install channel (application fee applicable).
11. Residents pay for home charge point and instruct government registered installer with its installation and issuing of appropriate safety certification.
12. Residents pay supplier for supply and installation of channel. An annually renewable administration fee may also be payable. It is proposed that this would be collected by the supplier and passed on to the Council as part of contractual agreements between the supplier and the Council.
13. Home charge point is installed. Safety certificate is submitted to Council.
14. Supplier tasks their contractor with installation of pavement channel. Channel is installed and will remain in the ownership of supplier.
15. Supplier invoices residents for supply and installation of pavement channel.
16. Residents receive the £1,200 per channel EVPC grant as a *de facto* discount for the channel and its installation.

3.2.25 The cost to residents of participating in the trial will vary, with the exact cost being determined by the factors and processes outlined above. However, it is likely that the cost will exceed the £1,200 per channel grant.

4.0 Stakeholder and ward member consultation and engagement

- 4.1 The approach proposed for undertaking a trial of XPS in Brent has been developed in close consultations with officers from different Council teams, including Highways Management, Healthy Streets & Parking, Planning, Finance, Legal, Equalities as well as Organisational Assurance and Resilience. The trial approach is also informed by a range of formal guidance including the Government's [Cross-pavement solutions for charging electric vehicles - GOV.UK](#) and [London Councils' Cross-pavement EV charging report 0.pdf](#). In addition, officers are in regular dialogue with other London boroughs who are actively undertaking, or considering whether to undertake, trials of XPS.
- 4.2. Officers have also engaged in dialogue with Members and residents interested in the trial and how it will work. Their questions and suggestions have helped inform the criteria and processes around site selection and application for taking part in the trial.

5.0 Financial Considerations

- 5.1 Brent has been allocated DfT grant funding totalling £169,000 towards the capital costs of installing pavement charging channels. The per unit funding contribution for these channels is capped at £1,200, the funding allocation would therefore support the rollout of 141 channels. There is no requirement for match funding from the local authority as part of the grant funding arrangements.
- 5.2 Residents pay the various costs related to purchasing, installing, and maintaining a cross-footway solution. As the cost of the whole process - including resident application, supply and installation of the pavement channel will exceed the funding cap of £1,200 per unit, the remaining costs are expected to be met by the residents participating in the trial. The grant funding will essentially function as a discount to trial participants.
- 5.3 Under the proposed delivery mechanism, the Council will also incur an estimated £14,100 capital costs associated with initial site assessments. This will be funded using non-refundable application fees received from eligible residents.
- 5.4 The total budget request is therefore £183,100 to cover initial site assessment costs and the Council's contributions for a maximum of 141 EV pavement channels.
- 5.6 The installed EV pavement channels will be owned and managed by the supplier. This delivery mechanism reduces risk for the Council.
- 5.7 The mechanism for distributing the grant has been designed based on external VAT advice. By providing a grant to residents, the Council's payment is out of scope of VAT limiting VAT risks to the Council.

6.0 Legal Considerations

- 6.1 Pursuant to paragraph 9.5 of Part 3 of the Constitution, The Corporate Director for Neighbourhoods and Regeneration, in consultation with the Cabinet Member for Public Realm and Enforcement and the Corporate Director Finance and Resources Enforcement approved the Council's entry into a grant agreement for the Electric Vehicle Pavement Channels Grant in the sum of £169,000 for the purpose of:
 - i. Undertaking a trial for electric vehicle pavement channels, to enable the Council to gauge the suitability of the technology and to establish suitable criteria/processes for possible wider deployment across Brent;
 - ii. Subsidising the capital costs associated with the purchase, installation and operation of pavement channels on the public highway.

7.0 Equity, Diversity & Inclusion (EDI) Considerations

- 7.1 The public sector duty set out in Section 149 of the Equality Act 2010 requires the Council, when exercising its public functions, to have due regard to the need to eliminate discrimination, harassment and victimisation and other conduct prohibited under the Act, and to advance equality of opportunity and foster good relations between those who share a protected characteristic and those who do not share that protected characteristic. The protected characteristics are age, care experience, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation and socio-economic status.
- 7.2 Having due regard involves the need to enquire into whether and how a proposed decision disproportionately affects people with a protected characteristic and the need to consider taking steps to meet the needs of persons who share a protected characteristic that are different from the needs of persons who do not share it. This includes removing or minimising disadvantages suffered by persons who share a protected characteristic that are connected to that characteristic.
- 7.3 Road transport is the main source of nitrogen dioxide (NO_x) and a significant contributor to particulate matter (PMs) in Brent, two of the most dangerous pollutants, which contribute to the premature death of nearly 10,000 people a year in London. Motor vehicles are currently responsible for 49% of NO_x emissions and 30% of PM₁₀ emissions in the borough. Facilitating the uptake of low/zero emission vehicles through increased provision of electric vehicle charging facilities provides significant opportunities to improve air quality across the borough and will benefit the health of everyone who lives or works in or visits Brent. Measures such as cross-pavement charging channels, that will enable more drivers without access to off-street parking to switch to EVs from internal combustion engines, may positively impact the health and wellbeing of residents.
- 7.4 In addition, the potential to save on the cost of charging an EV by being able to use the lower taxed domestic electricity supply, could particularly support some drivers who are experiencing socio-economic disadvantage. Furthermore, drivers with disabilities, including Motability customers, could also benefit from being able to access EV charging closer to their home, where public on-street chargepoints may not be easily accessible to them. This indicates that there may be positive equality impacts on people with disabilities.
- 7.5 To ensure fairness and inclusivity during the trial, any aspects of individual XPS locations, that might have the potential to disproportionately or negatively impact on individuals or groups with protected characteristic, notably disability, age, and pregnancy, will be taken into consideration as part of finalising the site selection criteria. No installations will take place without defined safety and accessibility criteria, and any policy proposals emerging from the pilot will undergo an Equality Impact Assessment to ensure any negative impacts are mitigated. As part of the trial monitoring and evaluation any emerging impacts will be reviewed to determine any further anticipated impacts as part of planning for the next phase of the project, should this be decided to go forward.

8.0 Climate Change and Environmental Considerations

- 8.1 Supporting and encouraging Brent drivers in the transition from petrol and diesel vehicles to EVs is seen as a key facet to helping tackle the climate and emergency and poor air quality in the borough. Amongst the key actions identified in the Brent Climate Ecological Emergency Strategy and the Brent Air Quality Action Plan, and in line with the environmental goals set by London Councils, include plans for petrol and diesel road journeys to have at least halved by 2030 and for the borough's EV charging infrastructure to be expanded. The EV cross-pavement charging channels proposed to be delivered as part of the trial will further support these aims.

9.0 Human Resources/Property Considerations (if appropriate)

- 9.1 London Borough of Brent have been awarded LEVI capability funding of £123,408 for the period from 2026/27 to 2028/29 to ensure Brent, alongside other local authorities, have the staff and capability to plan and deliver chargepoint infrastructure, which can go beyond just LEVI programme delivery. This will be delivered annually as a grant payment from the Department for Transport under Section 31 of the Local Government Act 2003.
- 9.2 This funding contributes to the staffing cost of the EV & Shared Mobility Programme Coordinator role, supporting Brent's overall EVI capability. The trial will be delivered by the EV & Shared Mobility Programme Coordinator, once they are in post (expected Autumn 2026), supported by existing staff resources.

10.0 Communication Considerations

- 10.1 Communications regarding the proposed trial have already been issues, alongside further information on the Council website informing residents about the trial and how to register interest in participation. Further work on a wider communications programme will be developed ahead of the roll-out of the trial.

Report sign off:

Jehan Weerasinghe

Corporate Director of Neighbourhoods & Regeneration

Legal considerations provided by:
Hussain Ali,

Finance considerations provided by:
Yemi Adekunle,