

## **EQUALITY IMPACT ASSESSMENT**

**Reference:** CCC625217826

**Directorate:** Place and Sustainability

**Service:** Transport & Infrastructure Policy & Funding

**Team:** Transport and Infrastructure Policy

**Your name:** Sarah Hatcher

**Your job title:** Principal Transport and Infrastructure Officer

**Directorate:** Place and Sustainability

**Service:** Transport & Infrastructure Policy & Funding

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**Proposal being assessed:** Procurement of Electric Vehicle Infrastructure

**Business plan proposal number:** n/a

### **Key service delivery objectives and outcomes:**

In May 2019, Cambridgeshire County Council declared a Climate and Environment Emergency, setting us on a pathway to securing a sustainable future for our County and its residents. It committed us to achieving net zero in Cambridgeshire by 2045, through decarbonising our communities and businesses. In response to this, a Climate and Environment Strategy was developed and adopted in 2022, which provides a framework for this change and puts climate change and biodiversity at the heart of the council's work. In order to become a net zero area by 2045, one of the strategic priorities of the strategy is to enable and encourage the use of low-carbon transport, which includes electric vehicles (EVs). Government has announced the sale of new petrol and diesel cars and vans will be banned from 2035 in a bid to accelerate the transition to cleaner low emission vehicles. Whilst still forming a relatively small percentage of overall vehicles, absolute numbers of new EVs registered to addresses in Cambridgeshire have been growing exponentially in recent years and these figures are only going to get larger, particularly as second and third hand markets for these types of vehicles begin to emerge.

To support this, there will need to be a step change in the provision of electric vehicle charging infrastructure across the network, particularly those available for public use and infrastructure for use by residents who do not have access to offstreet parking. The amount of EV charging infrastructure has not grown at the same rate as the uptake of the vehicles themselves and this is seen as one of the barriers that could slow the transition to EVs. As of April 2024, there are some 380 publicly available chargepoints in Cambridgeshire. This figure will need to rise considerably to stimulate and keep pace with demand. Furthermore, at the current time, there is no

legal means available for residents without off-street parking to charge their electric vehicle from their domestic electricity tariff, whilst parked on the public highway. This means that such residents are wholly reliant on charging from more expensive public chargepoints.

Cambridgeshire County Council has already considered and adopted a policy on the provision of EV infrastructure on the public highway and has also approved a trial of cross-over cable charging solutions. EqlAs have been undertaken for both these pieces of work and the findings from both of these are rehearsed again here, as well as new evidence included.

### **What is the proposal:**

Government is keen to accelerate the delivery of electric vehicle charging infrastructure in order to provide confidence in the market and stimulate demand for the transition to EVs. It is recognised that EVs have a role to play in meeting our net zero targets and that there will be considerable benefits brought to our cities and towns through improved air quality. It also recognises that one of the barriers to transition to EVs is the perceived and actual lack of charging solutions for residents who don't have access to off-street parking. To address this, it launched the Local Electric Vehicle Infrastructure (LEVI) fund with the objectives of accelerating the roll out of public on-street chargepoints to support people without off-street parking and leveraging in private investment.

Cambridgeshire County Council is required to work with the Cambridgeshire and Peterborough Combined Authority and Peterborough City Council to develop a submission to the Office for Zero Emission Vehicles (OZEV) to draw down the funding and demonstrate how we expect the private sector to work with us to roll out a network of public chargepoints across the county. This will be through the design of a commercial approach and development of a procurement exercise to deploy EV chargepoints across the county.

### **What information did you use to assess who would be affected by this proposal?:**

There are a number of angles from which to consider the impact of the proposal:

1. The impact of the general approach to the siting of EV infrastructure on the public highway and the interaction with other policy areas
2. The accessibility of an EV chargepoint itself once a location has been determined
3. The impact on socio-economic groups by not being able to have access to cheaper, domestic electricity tariffs as they have no off-street parking
4. The impact of not being able to access a public chargepoint within a reasonable distance of home

In considering these aspects, data was sought on car ownership and access to a vehicle, data around people who walk, wheel and cycle, studies and research carried out by campaign groups and groups representing people with protected characteristics. Data was also sought on the percentage of homes without access to

off-street parking, the current locations of publicly available chargepoints, indices of multiple deprivation, the distribution of Motability customers, travel to work data and commute distance.

**Are there any gaps in the information you used to assess who would be affected by this proposal?:** No

**Does the proposal cover:** All staff countywide, All service users/customers/service provision countywide

**Which particular employee groups/service user groups will be affected by this proposal?:**

All employee and service user groups will be affected by this proposal in the longer term if they use a vehicle, whether as a driver, passenger or have visitors. With the government ban on the sale of new ICE vehicles from 2035, there will be a more mature second and third hand market for EVs than currently exists. In situations where people don't have the ability to charge at or near their home because they have no off-street parking, this will become a barrier to making the switch to EVs.

**Does the proposal relate to the equality objectives set by the Council's Single Equality Strategy?:** Yes

**Will people with particular protected characteristics or people experiencing socio-economic inequalities be over/under represented in affected groups:**

Mixture of over/under represented and in line with population, depending on the group

**Does the proposal relate to services that have been identified as being important to people with particular protected characteristics/who are experiencing socio-economic inequalities?:** Yes

**Does the proposal relate to an area with known inequalities?:** Don't know

**What is the significance of the impact on affected persons?:**

*The impact of not being able to access a public chargepoint within a reasonable distance of home*

Analysis of data has shown that across the county there are significant proportions of households who it is estimated don't have access to off-street parking. The table below illustrates how this varies across districts and compares to the number of known public chargepoints and the number of chargepoints per 100,000 population.

	Estimated % of households without off-street parking	Number of public chargepoints in district (as at Jan 2024)	Number of public chargepoints per 100,000 population (as at Jan 2024)
Cambridge	49%	146	100.9
East Cambridgeshire	21%	42	47.6

Fenland	20%	11	10.7
Huntingdonshire	23%	77	42.4
South Cambridgeshire	21%	102	62.6

The figures demonstrate how the market is currently catering for commercially viable locations. Despite almost half of Cambridge households estimated not to have access to off-street parking, there are ten times more public chargepoints per 100,000 population than in Fenland.

This shows a significant impact in more rural areas, where around one in five households are estimated to not have off-street parking but are also poorly served by public chargepoints.

*The impact on socio-economic groups by not being able to have access to cheaper, domestic electricity tariffs as they have no off-street parking*

Under the current UK tax system, domestic electricity supplies are subject to VAT at 5%, whereas it is charged at 20% on all other supplies, including public chargepoints. Time of use tariffs are increasingly being introduced that domestic electricity customers can take advantage of to reduce their electricity costs, particularly when use is overnight when demand is lower.

Because of this discrepancy in VAT tariffs, it will be more expensive for those without the ability to charge their EV from their domestic supply than those who can. Properties that have space for off-street parking have a larger curtilage and generally are more expensive than those that do not. It can be inferred that the types of property that don't have the benefit of off-street parking are likely to be inhabited by residents in a lower socio-economic group than in areas where the prevailing property type allows for more off-street charging. There is therefore likely to be a significant impact in the future when the second and third hand market for EVs replaces the same market for ICE vehicles where it will cost more to charge for people on lower incomes as they are wholly reliant on public chargepoints. Based on current tariffs, there is an emerging equity issue between those who can charge from home and those who rely on public chargepoints.

*The impact of the general approach to the siting of EV infrastructure on the public highway and the interaction with other policy areas:*

If EVCPs are located in the footway, or cables or other obstructions are placed across the footway to connect to a vehicle on the carriageway, then the greatest impact is likely to be on pedestrians or those who use wheeled modes such as wheelchairs, mobility scooters or who are encumbered with pushchairs. The impact of additional street furniture can be significant for groups with disabilities.

The Disabled Citizen's Inquiry, funded by the Motability Foundation and undertaken by Sustrans, researched the impact on environment for disabled people and found that: 41% of disabled people in the UK often experience problems reaching their destination due to the accessibility of the environment around them on a typical

walking or wheeling journey, increasing to 55% for people with mobility impairments or learning disabilities; 58% of deaf or hard of hearing people and 64% for blind or visually impaired people.

The significance of issues for disabled people with street clutter and obstacles is further nuanced by the intersectionality of other protected characteristics, such as sex and ethnicity. The same research found that 45% of disabled women, compared to 35% of disabled men experience difficulty getting to their destination. This reflects wider enduring trends around the gendered division of unpaid labour and caring responsibilities still overwhelmingly lying with women. Whether or not they are disabled, women tend to be more encumbered by travelling with prams and pushchairs, small children or elderly people they are caring for.

Disabled women can feel the double impact of their gender and disability. Disability when it intersects with ethnicity also exacerbates the difficulties that white disabled people encounter in additional obstacles in the environment. 53% of disabled people of colour often experience difficulties reaching their destination due to accessibility, compared to 32% of white disabled people. Furthermore, the Disabled Citizen's Inquiry also found that when disability intersects with socio-economic factors such as low income, then the cumulative impact can be seen, with a considerably higher proportion of disabled people in socio-economic groups D and E often experiencing negative impacts.

*The accessibility of an EV chargepoint itself once a location has been determined:*

It is estimated that by 2035 when the ban on the sale of new diesel and petrol cars comes into effect, there will be around 2.7million drivers with disabilities who will need to be able to use EVCPs to charge their electric vehicles. Ensuring that where EVCPs are installed they are accessible to everyone needs careful consideration.

Charging infrastructure is developing rapidly and there are many examples where consideration of accessibility needs have not been undertaken. A piece of research was conducted by the Research Institute for Disabled Consumers in 2019 to understand the challenges that disabled people faced when trying to use EVCPs. The respondents to its survey overwhelmingly identified as having a mobility impairment (75%) and/or a dexterity/physical strength impairment (27%). 73% of respondents who had seen publicly available chargepoints perceived them as neither accessible nor easy to use. They cited reasons such as insufficient width of parking bays to manoeuvre around, height and position of charging points, lack of EVCPs available and the time taken to charge.

This lack of accessible charging infrastructure is potentially a significant impact for disabled drivers. Many disabled drivers make use of the Motability scheme to lease accessible vehicles in exchange for their mobility allowance. The scheme is forging ahead with offering EVs as an option and their availability will only increase as the 2035 date for the ban on sales of new petrol and diesel cars approaches. The lack of accessible chargepoints will become a significant issue for these users if not addressed.

Properties that have space for off-street parking have a larger curtilage and generally are more expensive than those that do not. The types of property that are likely to benefit from this trial mean that there are likely to be more people in a lower socio-economic group than in areas where the prevailing property type allows for more off-street charging. Those in lower socio-economic groups are more likely to need to use the footway and be impacted by intersectionality issues identified, therefore any negative impacts of the cross-over trial are likely to be significant.

**Category of the work being planned:** Procurement

**Is it foreseeable that people from any protected characteristic group(s) or people experiencing socio-economic inequalities will be impacted by the implementation of this proposal (including during the change management process)?:** Yes

**Please select:** Age, Disability, Sex, Socio-economic inequalities; rural isolation

**Research, data and /or statistical evidence:**

**Research relating to age:**

Public Health England: [Working together to promote active travel \(2016\)](#)

Sustrans: [The Greater Cambridge Walking and Cycling Index \(2021\)](#)

Possible: [Streetspace Invaders: mitigating the growing risk that EV charging poses to scarce pedestrian space \(2023\)](#)

**Research relating to disability:**

DfT: [Walking and cycling statistics factsheet \(2021\)](#)

Research Institute for Disabled Consumers: [Going electric? Research report into the accessibility of electric vehicles \(2021\)](#)

Motability: [The Transport Accessibility Gap \(2022\)](#)

Sustrans: [The Disabled Citizen's Inquiry \(2022\)](#)

Sustrans: [The Greater Cambridge Walking and Cycling Index \(2021\)](#)

Possible: [Streetspace Invaders: mitigating the growing risk that EV charging poses to scarce pedestrian space \(2023\)](#)

**Research relating to sex:**

DfT: [Walking and cycling statistics factsheet \(2021\)](#)

Sustrans: [The Disabled Citizen's Inquiry \(2022\)](#)

Women's Budget Group: [Towards gender inclusive and sustainable transport](#)

[systems \(2021\)](#)

International Transport Forum: [Transport Innovation for Sustainable Transport - a gender perspective \(2021\)](#)

Sustrans: [The Greater Cambridge Walking and Cycling Index \(2021\)](#)

Invisible Women by Caroline Criado-Perez Invisible Women | Caroline Criado Perez

Possible: [Streetspace Invaders: mitigating the growing risk that EV charging poses to scarce pedestrian space \(2023\)](#)

### **Research relating to socio-economic status:**

DfT: [Walking and cycling statistics factsheet \(2021\)](#)

Sustrans: [The Disabled Citizen's Inquiry \(2022\)](#)

The Health Foundation: [Trends in households without access to a car \(2021\)](#)

Sustrans: [The Greater Cambridge Walking and Cycling Index \(2021\)](#)

Possible: Streetspace Invaders: [mitigating the growing risk that EV charging poses to scarce pedestrian space \(2023\)](#)

Cenex: [Electric Vehicle Infrastructure Barriers \(2021\)](#)

### **Research on market costs and infrastructure:**

ZapMap: [Charging Price Index \(accessed May 2024\)](#)

ZapMap: [Public Chargepoint locations \(accessed May 2024\)](#)

DfT: [Electric Vehicle Charging Device Statistics \(accessed May 2024\)](#)

### **Research on local data:**

Motability customers: Distribution of customers in Cambridgeshire

Cambridgeshire Insights: [Census 2021 Travel to Work summary](#)

Cambridgeshire Insights: Indices of Multiple Deprivation

### **Consultation evidence:**

Research Institute for Disabled Consumers: [Going electric? Research report into the accessibility of electric vehicles \(2021\)](#) Appendix C sets out questions used in survey to inform research.

Designability: [Design guidance accessible EV charging \(2022\) Engaged with 200 Motability scheme members](#)

Sustrans: [The Disabled Citizen's Inquiry \(2022\)](#) The appendix of this report sets out

the methodology used, details questions asked at workshops and criteria for people invited to participate in workshops.

Sustrans: [The Greater Cambridge Walking and Cycling Index \(2021\)](#) Includes the questions and results of an attitudinal survey conducted June-August 2021

Cambridgeshire and Peterborough Combined Authority: (2024) Survey on consumer behaviour and preferences of current and future EV drivers (to be published June 2024)

**Based on all the evidence you have reviewed/gathered, what positive impacts are anticipated from this proposal?:**

The deployment of publicly available EV chargepoints is currently largely led by the private sector, based on commercial viability, resulting in large swathes of the county without access to a publicly accessible chargepoint near their home. Through a successful submission to the LEVI fund, the county council and its public sector partners have the opportunity to help shape a network of public chargepoints, ensuring an equitable distribution across the county and addressing market failure where sites aren't necessarily commercially viable.

Through involvement in the procurement of EVI, there is an opportunity to ensure that locally-important outcomes are achieved, rather than the deployment of EVI being limited only to commercially viable locations.

Through using local data, we can explore through early engagement with the market and stipulation through the procurement process where we consider provision must be made as part of the letting of contracts.

Whilst unlikely to achieve parity with domestic supply tariffs under the tax system, we can explore ways through our leverage of making the gap between domestic charging costs and public charging costs smaller, so that those who can only afford to live in smaller properties and are therefore less likely to have off-street parking are not further disadvantaged by having to pay more to charge their vehicle.

With fleets leading the transition to EVs, even in areas of the county where EV ownership is currently lower, there is evidence of unmet need for on-street charging for residents who need to bring a vehicle such as a van home overnight to charge. It is anticipated that Motability, who provide adapted vehicles for disabled people will have transitioned their entire fleet to electric vehicles by 2027. Data shows that Motability customers are distributed widely across the county, including in the rural districts with fewer public chargepoints. Therefore increasing provision in these areas will be beneficial to disabled drivers or passengers.

**Based on consultation evidence or similar, what negative impacts are anticipated from this proposal?:**



Without mitigation, the following negative impacts could be anticipated through an increase of chargepoints across the county:

- Narrowing of footways through increased street clutter:

Without a strong policy position on the presumption against siting EVCPs in the footway except in exceptional circumstances, the forecast increase in EVCPs required to meet demand could result in the narrowing of footways and an increase in the amount of obstacles in the footway in the form of street clutter. A narrowing of the footway is likely to result in circumstances arising where two wheelchairs or pushchairs are unable to safely pass each other, even where the footway is currently wide enough to do so which often isn't the case. Again, this impact is likely to disproportionately affect disabled groups, females (who are statistically more like to be undertaking caring responsibilities) and older groups.

- Inaccessible EVCPs:

Without a strong policy position on our requirements and standards around the accessibility of EVCPs themselves, then research shows that there could be negative impacts around lack of signage and information; the built environment - including space around the vehicle - and the chargepoint itself in terms of being able to see reach and use parts of the unit. Again, the most impacted groups are likely to be disabled groups, older groups and those with caring responsibilities who are often encumbered, statistically likely to be female.

- Inability to charge electric vehicle near home due to inequitable distribution of chargepoints around the county:  
Without the public sector stepping in to address market failure, there is a high risk that large parts of the rural county will be left without a reasonable distribution of public chargepoints as suppliers focus on commercially viable locations
- Increased inequalities for those unable to use domestic supply tariffs to charge their vehicle if forced to rely solely on public chargepoints

### **How will the process of change be managed?:**

As individual schemes come forward, it will be necessary for the individual project to undertake a more detailed EqIA that considers more nuanced impacts that may arise as a result of specific geographical locations. It will be expected that appropriate consultation and engagement will be undertaken with groups identified in this overarching EqIA to ensure that impacts are fully identified and appropriate steps taken to mitigate against any that are negative.

### **How will the impacts during the change process be monitored and improvements made (where required)?:**

Feedback and monitoring of the roll-out will take place throughout the lifetime of the contract, through the contract management process.

### **Equality Impact Assessment Action Plan:**

Details of negative impact (e.g. worse treatment/outcomes)	Groups affected	Severity of impact	Action to mitigate impact with reasons/evidence to support this or justification for retaining negative impact	Who by	When by
If EVCPs are located in the footway, or cables or other obstructions are placed across the footway to connect to a vehicle on the carriageway, then the greatest impact is likely to be on pedestrians or those who use wheeled modes such as wheelchairs, mobility scooters or who travel with pushchairs. The significance of added street furniture can be significant for groups with disabilities.	Age, Disability, Sex, Socio-economic inequalities	Medium	Ensure tender documents specify that chargepoints must be installed in line with CCC EV highway policy which was developed to mitigate these identified impacts	Sarah Hatcher	31/03/25
EVCPs not being accessible for people with disabilities, older age groups who can find digital technology a barrier, women who often are encumbered by small children or other caring responsibilities.	Age, Disability, Sex, Socio-economic inequalities	Medium	Ensure tender documents specify that chargepoints must be installed in line with CCC EV highway policy which was developed to mitigate these identified impacts A requirement will also be included that for any installation, an EqIA must be completed using Cambridgeshire	Sarah Hatcher	31/03/25

			County Council templates, that gives due regard to the following considerations: signage and information; the built environment including space around the vehicle; charging of the vehicle.		
Residents without access to off-street parking and who live in locations not seen as commercially viable for chargepoint operators have limited options to charge an EV	Socio-economic	High	Specify in tender documents areas that need to be covered in deployment of EV infrastructure	Sarah Hatcher	31/03/25
Residents without off-street parking will pay more to charge an EV at a public chargepoint than residents who are able to charge at home from a domestic supply	Socio-economic	Medium	Explore in soft market testing and include question in Invitation to Tender how differential charging rates might be applied for local residents	Sarah Hatcher	31/03/25

**Head of service:** Jeremy Smith

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**Confirmation:** I confirm that this HoS is correct

**Status:** Approved