Cross-Pavement Solutions

Closing the charging divide for those without driveways

EVA England

Cross-Pavement Solutions - Closing the charging divide for those without driveways
January 2026

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EVA England
Electric Vehicle Association England

About Electric Vehicle Association England
As a members' association, EVA England is the only organisation in the country solely dedicated to current and future electric vehicle (EV) drivers' interests, independently of the EV manufacturing and charging sectors.

We focus our data gathering and policy formulation on driver perceptions: the appetite for EVs across the driving community; how current EV drivers are responding to improvements in charging and fluctuations in purchasing and charging costs; and where barriers remain, dissuading more drivers from switching to electric.

We regularly run driver surveys and member workshops to gather feedback on what aspects of the transition work well for consumers and where improvements still need to be made.

Executive Summary

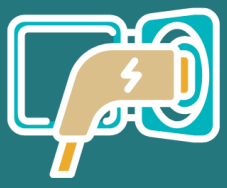
The charging divide between those who have a driveway and those who do not is becoming the biggest barrier to the use of EVs for millions of households.

Cross-pavement solutions are an essential technology to overcome this barrier – where they have been installed, resident feedback in our latest EVA England driver survey is overwhelmingly positive.

However, the costs of installation are far higher than for those installing a chargepoint on a driveway: residents report costs of up to £3,000, with £500 of these coming from planning permissions. These costs can be prohibitive – with a payback period for drivers of around 5 years.

Furthermore, the process for applying for these solutions is complex and lengthy. Residents report not having a clue where to start, or not knowing in the first place that these solutions are available to them. Those who have applied are having to wait at least three months, and sometimes up to two years, for permission to install these solutions.

Less than 1% of the thousands of drivers surveyed by EVA England last summer have managed to install a cross-pavement solution. In our most recent, more detailed survey of 158 drivers, over 9 in 10 respondents (93%) without a driveway do not have a cross-pavement solution, despite 78% believing such a solution would work for their living circumstances. 37% have previously tried, or are in the process of trying, to apply for a cross-pavement charging solution.



<1%

of EV drivers have managed to install a cross-pavement solution

78%

of EV drivers without a driveway believe such a solution would work for their living circumstances

37%

of EV drivers without a driveway have applied or are in the process of applying for one

Unpicking the reasons behind this, drivers expressed their frustrations around the opaqueness of the application process. They emphasised a widely held belief that local authorities were obstructing their ability to take advantage of these technologies, viewing them as unworkable and risky, despite evidence showing the complete opposite.

New permitted development rights (PDRs) to allow for the installation of cross-pavement solutions, and associated chargepoints, are essential. They will strengthen signals to local government that these solutions should be taken seriously; substantially reduce the costs for residents; and simplify the process for both residents and installers, reducing wait times and administrative burdens on drivers and allowing more and more households to access affordable charging.

EVA England campaigned for these rights to be extended to cross-pavement solutions during the passage of the Planning and Infrastructure Bill through Parliament. We therefore welcome the Government consulting on this issue, and strongly agree with its proposals to extend PDRs to cross-pavement solutions and their associated chargepoints.

However, these planning easements must not be done in isolation. Government has already recognised this by introducing the £25m cross-pavement fund to encourage more local authorities to allow these solutions. Government also wrote to all local authorities, impressing upon them the importance these solutions play in allowing residents to access affordable charging and asking them to use their contractors to deliver the installations, and so reduce planning and safety risks and costs further.

But drivers themselves need to be better supported both in understanding if these technologies are available; and how to apply for them. Local authorities, installers and drivers need to be clear on the correct procedures for installation – including for complying with electrical safety risks – and their obligations once these solutions are up and running.

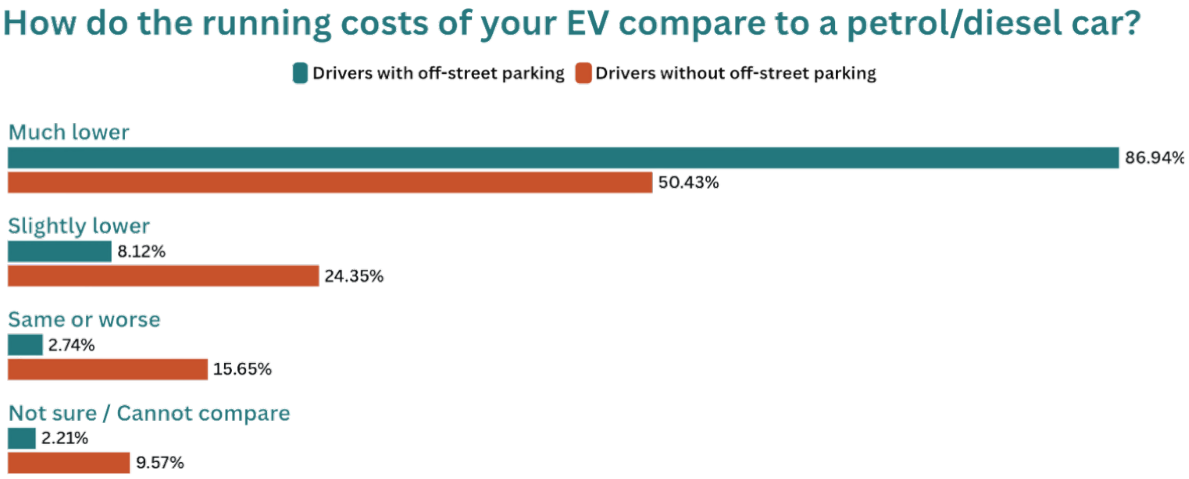
Better guidance for residents; and an extension of existing public information campaigns – including the Government's new 'Get the Electric Feeling' campaign'[1] – to solutions that are working on the ground for those without driveways, are also essential parts of a package that will genuinely support more drivers in transitioning to an electric future that is fair for all of us.

1 Department for Transport, Get that Electric Feeling, January 2026

Why are cross-pavement solutions so important?

Our most recent annual EVA England survey of 1,668 drivers – 1,279 of whom are EV drivers[2] – shows that **the charging divide between those who have driveways and those who cannot is becoming the most prominent practical barrier holding up the EV transition.**

90% of EV drivers surveyed have off-street parking, and 81% own a home charger. **Whilst 87% of EV drivers with driveways are finding their EV cheaper to run, only 50% without driveways do, and 60% of drivers without a driveway say they won't ever consider an EV (compared to 43% with a driveway).**



Charging costs at public charging points are considerably higher compared to private charging, and vary enormously depending on the type of charging point. Those public chargepoints used for residential charging tend to be slow chargers below 8kW or fast chargers below 22kW. Overall, the average cost from home charging is 32p per kWh and 52p per kWh for public charging[3], but home charging can cost as little as 7p per kWh, and public charging currently as much as 98p per kWh.

This charging divide is reflected in drivers' decisions over whether to go electric:

"[Running costs are] much lower but only because I can charge at home. If I had to rely only on public charging it would work out more expensive I think."

"Depends... if mostly home charging then much cheaper; but if driving long distance about the same or slightly less. Public Charging sites in UK generally way too expensive! Government should help if we are to go C-neutral asap!"

"I am lucky I can charge at home and work at a low price. If I needed to use public charging a lot then it would not be as good a comparison. Public charging is generally too expensive."

2 EVA England, Steer The Conversation, October 2025
3 Zapmap, Zapmap Price Index, January 2026

The financial gap between home and public charging is now one of the most important equity issues in the EV transition. **For drivers without off-street parking (which we estimate to be around 8- 9.9 million households, or 30 - 40% of UK households), this disparity means the total cost of ownership can be significantly higher, and the case for a household transitioning to electric collapses.**

One of the most practical, low-cost solutions for these households is cross-pavement charging technologies – for example, gullies, safe under-pavement cabling, or overhead gantries - allowing residents without a private driveway to charge their car from their home electricity supply. However, the system remains niche: **only 1% of drivers responding to our annual survey reported using a cross-pavement solution in our survey, and 57% reported being unaware of their existence before acquiring their EV.**

Why aren't more drivers using cross-pavement technologies?

At EVA England, we carried out a follow-up survey to dive deeper into why this was the case, collecting 158 responses from EV drivers already using or interested in using these technologies.

Key findings:

Whilst over 9 in 10 drivers (93%, or 110 drivers) without a driveway do not have a cross-pavement charging solution, 78% (88 drivers) said they feasibly could. 37% (33 drivers) said they had tried applying for one.

In the survey, 119 respondents (75%) said they did not have a driveway. **93 of these drivers (78%) confirmed a cross-pavement solution (either a gully, gantry or under pavement solution such as Trojan – with all three being cited) would suit their living circumstances.**

However, only 8 drivers had, to date, been able to install a cross-pavement solution and three drivers stated they would not purchase an EV until they could install one, as the costs of charging on the public network would be too prohibitive for them.

Those who had installed a cross-pavement solution, or knew of friends and family who had, described extremely positive experiences: the fact that these solutions are safer than leaving households to just run cables across the pavement; that they worked and were easy to use; and that they allowed them cheaper, affordable charging.

Positive feedback from drivers:

"I would be very keen to trial cross pavement solutions in Brighton."

"I've seen examples in local boroughs and on private roads. Discussion with users indicates that they're great."

"For me a cable gulley would be ideal as I live in a terrace with no off-street parking […] . They also create less clutter than on-street chargers as the charging socket would be in the front garden and won't rely on the council or charging network to maintain it. Finally, it seems to make sense to me to allow homeowners and occupiers to pay for infrastructure that benefits them rather than using the small amount of funding available to pay for a handful of on-street chargers. Sheffield City Council just need to allow us to have a gulley, I don't mind paying!"

Nearly all who had not installed a cross-pavement solution cited issues with their local authority or council ignoring or refusing their requests, or taking too long to come back to them with a decision. Some were still waiting at least three months after applying; others had been waiting up to two years after first enquiring with their local authorities.

"[...] My local council (Warwickshire) have still not authorised them to proceed in the county - I've been chasing for 18 months. [...]"

A number of local authorities were named by drivers as not supporting them in understanding or acquiring these technologies. These included: Barnet, Basingstoke and Dean, Brighton & Hove, Bristol, Buckinghamshire, Cheshire, Croydon, Durham, Essex, Ealing, Gloucestershire, Hammersmith and Fulham, Hampshire, Kent, Lambeth, Lewes, Norfolk, Portsmouth, Sheffield, Sutton, and Warwickshire.

"So far refused by Lambeth Council"

"Council (Buckinghamshire) does not currently allow it. 'Kerbo' has been trialled and implemented in all neighbouring councils, but Bucks it not being helpful."

"My local Highways Authority - Norfolk - has to date not accepted any applications for cross-pavement charging solutions saying the risks to personal safety and any future pavement works are too great. I first asked 12 months ago and have had several months of correspondence with them and they are still not considering trialling any solutions."

"Council initially said no. They are now about to run a trial which I have applied for."

"I have twice told Hammersmith & Fulham council I would like one and they should allow them. I have received no response."

56 drivers (60% of those who believed cross-pavement could work for them) said they hadn't even considered applying, with a number of these not realising these technologies were an option until now, or not knowing how to even go about applying.

A number of drivers who had looked into applying for a cross-pavement solution spoke about the planning permissions involved being too expensive.

Our previous surveys suggest that the planning costs associated with this, plus installation of the chargepoint and cross-pavement technology, can run to up to £3,000 in total in some cases, meaning the payback period for drivers can be up to five years.

Residents responding to this survey quoted additional planning costs of around £500 per household.

"Yes cost was high, as the length from kerb to the house was excessive, however I thought the £350 gov grant would go towards this. I am still waiting for the grant to be paid after it was approved in August 2025"

Those drivers who believed cross-pavement would not work for them cited the inability to park outside their house, or the fact that the pavement outside their house was too narrow or cluttered (with additional bollards, for example) to allow for safe installation of a gully solution. A few respondents cited that, for gully installations, the kerb height was an issue:

"The problem is the height of the kerb. Oxfordshire require a minimum of 7 cms and my house being of age (built in 1834) is part of a terrace which has a lower kerb of around 5 cms."

What drivers need

To ensure that more households have the option of accessing affordable charging, it is essential to ensure that:

- Cross-pavement solutions are accepted by local authorities as part of their area's charging landscape;
- Residents are clear that this is an option for them – and that they know how to apply for one;
- Residents are clear on when these technologies will not work for them;
- Cross-pavement solutions are easy to install; and
- The cost of installation to the resident is reduced so that the payback period is as short as possible.

Government Consultation

The Government has just finished its consultation on planning easements for the process of installing cross-pavement solutions and their associated chargepoints.

Permission for a cross-pavement solution is required from a local authority. However, the current law requires up to three separate permissions. Currently, a cross-pavement solution requires permission from a local authority (in its capacity as highway authority) to lay a cable across the pavement (under section 178, Highways Act 1980), planning permission for the cross-pavement solution and associated EV chargepoint, and street work permissions to install infrastructure.

Through the proposed changes, planning permission would be granted on a national basis via a Permitted Development Right (PDR). Those seeking to install a cross-pavement solution would not be required to submit a planning application, however section 178 permission and street works permissions would still be required for the installation of a cross-pavement solution.

Under the proposed changes, local authorities would still have the power to refuse permission for a cross-pavement solution under section 178, Highways Act 1980 – this requires local authority permission for a cable to be laid across a pavement – ensuring that where it is not practical or possible for a cross pavement solution to be installed (for example where there is no appropriate parking space outside the property).

EVA England campaigned hard for PDRs to be extended to cross-pavement solutions during the passage of the Planning and Infrastructure Bill through Parliament.

These changes will make the planning process easier and simpler and will therefore significantly reduce the costs and burdens to residents applying for cross pavement technologies, ensuring that more households are able to access affordable charging.

We therefore welcome the Government's consultation on this issue and strongly agree with their proposals that new permitted development rights should be introduced for the installation of cross pavement solutions, and off-street chargepoints linked to these solutions – removing one of the key barriers and costs to drivers from accessing these technologies.

How to ensure the safety of the pavement

The majority of drivers responding to our focused survey on cross-pavement solutions believed that **installation of these technologies improved the safety of the pavement, in the context of an EV transition where everyone will need access to affordable charging**.

Many respondents felt that there was a perception that cross-pavement technologies increased electrical safety risks and trip hazards, and that these were the excuses most local authorities used to refuse requests for the technologies, even though there is little evidence that this is the case, and the opposite may actually be true.

Some respondents were themselves trailing charging cables across the pavement, with or without a mat over the top – a practice approved in some local authorities. However, a number of respondents felt this presented a far greater electrical safety and trip hazard and that, whilst the perception may be that cross-pavement solutions presented a safety risk, **their use would actually remove that hazard and any associated risk**.

Drivers' experiences on this include:

"Hearsay stories of cables being run without a proper solution which have created a hazard, which would be avoided with proper cable gullies."

"I see people running cable's in North Tyneside now with unofficial cable covers. Surely approving cross pavement solutions is lower risk than people taking it into their own hands?"

"No cross pavement solutions locally. However, some drivers in my neighbourhood (of both EVs and camper vans) run cables straight across the pavement, which is a safety risk."

"Where I park at my sister's I run a cable across a pavement"

"Well mine is completely informal - I run a cable across the pavement from my house and put a proper rubber cable cover over it - my local authority hasn't yet raised a problem with this"

Some respondents felt that existing street furniture, such as bollards, presented greater accessibility issues; and a number didn't understand why local authorities approved the use of cables running across pavements for local events (e.g. Christmas markets) but wouldn't consider a safer, approved cross-pavement technology for EV drivers.

Based on their experience of applying for and using cross-pavement solutions, suggestions from drivers responding to our survey for ensuring the safety and accessibility of the pavement for all users included:

- Clear guidance for local authorities and installers on how to comply with relevant construction, accessibility (for example, the UK's Inclusive mobility guidance) and safety standards, including electrical safety standards.
- Clear advice to local authorities, installers and residents on how to ensure correct insurance, maintenance and liability procedures.
- Clear guidance to residents on how to apply for a cross-pavement solution, including under what circumstances cross-pavement technologies would not work
- Instructions to residents on their obligations following installation, including that having a cross-pavement solution did not mean a 'Right to park'.

The Government has produced guidance for local authorities and installers on how to comply with relevant standards and conditions and manage insurance, liability and maintenance. However, this guidance is not public, and there is no equivalent for residents. Local authorities themselves are not providing sufficient guidance – with nearly all residents responding to our survey believing their local councils were not interested in supporting them at all in installing a cross-pavement technology.

Drivers must be better supported in understanding that these technologies are available and how to apply for them. The Government must therefore consider how it is going to incentivise and support local authorities in giving correct information and advice to residents throughout the process. This must include what their obligations are once the technologies have been installed – such as maintenance and insurance - and best practice in managing the use of parking spaces outside their house where appropriate.

Extension of existing public information campaigns – including the Government's new 'Get that Electric Feeling campaign' – to solutions that are working on the ground for those without driveways, are also essential parts of a package that will genuinely support more drivers in transitioning to an electric future that is fair for all of us.

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