

Section One – Proposal Details

Name of Proposal (e.g. project, policy, plan, programme or service)	Local Electric Vehicle Infrastructure (LEVI) Project
Proposal Summary Aims, objectives and purpose of the Proposal summary. Include desired outcomes/ what the proposal is seeking to achieve. Please attach Proposal/ Business Case if applicable.	LEVI Funding is designed to support Local Authorities (LAs) to develop the growth of Electric Vehicle Charging Infrastructure (EVCI) within their area. The main purpose is to provide for those residents that do not have access to off-street parking, especially in areas that are not necessarily commercially viable. This funding will provide the necessary backing for LAs to procure and appoint a Charge Point Operator (CPO) to work with the Distribution Network Operator (DNO) to install charge points within the desired areas of need. The main aim is to provide EVCI which should help facilitate the growth of Electric Vehicle (EV) uptake within the region, promoting the decarbonisation of transport to help achieve strategic transport policies. TfGM have set out the following objectives for the LEVI Project: • Objective 1 – Providing EVI in areas which are currently commercially unviable. • Objective 2 – Supporting access to and for residents who do not have access to off-road facilities (driveway or garage) to charge their vehicles. • Objective 3 – Contributing to overall net carbon emission reductions from transport within the GM area to reach net zero by 2038. This is aligned with the government's ambitions for each carbon budget and for net zero by 2050. • Objective 4 – Transferring journeys made by Internal Combustion Engine (ICE) vehicles to Zero Emission Vehicles (ZEVs) to improve air quality for all, improving the health of the general population. The objectives were designed to view EV uptake as a catalyst to achieve certain policy set out in the 2040 Greater Manchester Transport Strategy. It is important that charge points in the region are inclusive to the people using them if we are serious about facilitating this uptake and making sure all people with an EV have the adequate infrastructure that's easy to use.

	As this project is overseen by TfGM from GM perspective, rather than managed per district, it is vital that the ITT (which was produced by TfGM and approved by GM) considers all KPIs relevant to performance of the successful tenderer. This will ensure consideration of potential impacts on the characteristics groups outlined below and any necessary mitigation is put in place and monitored to ensure it is effective. The project will create more opportunity for EV drivers in Greater Manchester to charge their vehicle, both for when at home or on the go. This funding aims to drastically improve the current numbers of EV charging within Greater Manchester, removing the barrier that current EV drivers share around availability and accessibility of public charge points. Please note: This is a live document and will be updated throughout the tender period. The document will be re-issued once all the relevant information has been compiled.
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Key Contact(s) for Proposal (Person or people responsible for completing the EqIA)	Deborah Howard Deborah-Ann.Howard@tfgm.com Debra Farricker Debra.Farricker@tfgm.com	Function/ Project Area	EVCI Programme/Logistics and Environment
Approver (Someone senior within the appropriate team delivering the project, policy, or strategy, who is aware of the EqIA, proposals and mitigations)	Megan Black Megan.Black@tfgm.com	PEI lead contact	Liz Hunger Liz.Hunger@tfgm.com

Section Two – Baseline Assessment

Protected Characteristic	What do we know about this group's usage of the current service/ provision/ policy/ infrastructure? (or lack of?)	Are there any existing barriers for this group? These barriers should be considered through your proposal.	Evidence source How do we know this?	Identify which protected characteristic groups are most impacted by the current provision, or lack of provision, and should therefore be engaged as part of any planned changes
Age	Data in this area can be quite vast however; it is concluded that the most popular age range of home owners living in properties without off-street parking is aged 25-34. This is for socio-economic reasons, with house prices for homes without off-street parking tending to be cheaper than those which do. The average age (whilst writing this assessment) for a first-time buyer is 34 years old, which has seen an increase over the last few years. According to the latest English Housing Survey (EHS) report from 2022, this again shows that homeowners aged between 25-34 years are more likely to live in properties without off-street parking due to affordability and the tendency to reside in urban areas, minimising the space for housing with off-street parking. This research implies that the age range for homeowners for properties	An existing barrier which affects all age groups is the lack of EV infrastructure. A report undertaken by Versinetic, looks at the insights for EV infrastructure challenges across the UK. Three main challenges highlighted for this assessment are listed below: Lack of charging infrastructure: 70% of those surveyed	Source for understanding the barriers for all ages when considering EV uptake - Charging challenges are the main block to UK EV vehicle adoption	Age bracket between 25-34. Older people, those over 65 – which counts for 15% of the Greater Manchester population. General Public.

	without off-street parking can differ, but it's those between 25-34 that should experience more benefit from the scheme, providing they have an EV. Looking at Greater Manchester Census Data for 2021, the highest proportion for age bracket was 25-34, showing there is a considerable need to provide for those who don't have access to off-street parking, when relating to the type of houses these residents live in. Greater Manchester has a population that is younger than the national average. Looking more at the other end of the age scale, those that are older EV users, or considering to be an EV user, mention that there are some existing barriers preventing them from being confident. One of these barriers is the design of the infrastructure, perhaps not taking some older people's mobility into consideration. It is noted that the height of charging ports may be difficult for older adults to reach, especially those with mobility issues or arthritis. Another issue is the physical layout of the charging station may not accommodate walkers or wheelchairs effectively. Technology can also be a barrier to use, with older people sometimes not used to the features required to charge and pay at an EV charging station. The lack of familiarity can lead to anxiety or reluctance to use the systems.	cited insufficient on-street charging as the leading infrastructure challenge blocking EV adoption. A third of UK households have no driveway, so a robust public charging infrastructure is required for comprehensive EV use. So far, on-street chargers have been installed principally on pavements or in lampposts; introducing street-level clutter. Lack of government funding: £1.6 billion has been pledged to a new Electric Vehicle Infrastructure Strategy, which will be used to fund EV charging hubs and innovative on-street charging. Despite this, half of those surveyed believe that the government is not	Source for understanding the age bracket for homeowners without off-street parking - English Housing Survey - GOV.UK RAC Study carried out by Urban Foresight with the article published in July 2022 - Inaccessible Charging is Barrier to Electric for Disabled and Older Drivers RiDC	
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		taking decisive enough action towards the development of the EV industry. Constantly changing regulations: More than a third of respondents (39%) saw changing regulations as a barrier to the further development of EV infrastructure, with the speed at which regulations are launched making it difficult for charger manufacturers to keep up Pay issues may be a barrier preventing a certain age group, like older users, to want to use EV charging.		
Disability	The news story article on the Government's website titled 'UK Government partners with disability charity to set standards for electric vehicle chargepoints' - UK government partners with disability charity to set standards for	Potential access issues to the infrastructure at the parking space, specifically getting to	Paper on accessibility issues with Electric Vehicle Charging Deployment	Mobility Impairments Users with mobility impairments are, or can be, heavily impacted by

	electric vehicle chargepoints - GOV.UK details that accessibility standards are to be developed for EV Chargepoints across the UK. Current issues faced by disabled people include the consistency of design, making it difficult for drivers to easily identify which charge points are suitable for their needs. This could range from adequate space between bollards, charging units being of a height suitable for wheelchair users, size of the parking bay and the kerb height. Design guidance is key for the supplier to reference when planning. Key pieces of guidance identified are the PAS1899 (pas_1889_final.pdf), a standard set out by the British Standards Institution (BSI) and co-sponsored by Motability, the national disability charity, and the UK Government's Office for Zero Emission Vehicles (OZEV). This highlights the areas needed for focus, as standard infrastructure presents barriers for disabled drivers and passengers. The heights of the various components, usability and manoeuvrability of chargepoint cables, physical connection of a chargepoint and screens or visual interfaces can all present an issue. When designing and implementing infrastructure, CPOs are advised to work with the Local Authorities (LAs) to understand what considerations are required, referencing to	the charge point at the side of a road. These roads and pavements can have several hazards such as high traffic volumes at speed, slippery conditions and poor/inadequate lighting. There is also the need for design to account for certain mobility issues, with such infrastructure like dropped kerbs and size of the bay/space between. From the group of disabled EV drivers surveyed, cars or other vehicles parking in the spaces designated for disabled EV drivers only was a problem. This needs to be mitigated with the CPO and LA officers for this project to ensure issues like this don't happen and	(Mandolakani & Singleton March 2024) highlights the problem faced by disabled users. This looks at population subgroups, so can be applicable to a few of the protected characteristics. Motability, who worked with Designability, to understand disabled driver's requirements for accessible charging. OZEV, Motability and BSI will be working with industry stakeholders including EV chargepoint operators, disability charities and innovators to ensure that the consumer can find the right chargepoints for their needs – stated in June 2021.	lack of relevant infrastructure at chargepoint locations. In particular, for one of the activities carried out, many of the users with mobility issues had either a Wheelchair and Mobility Scooter and used a Walking frame or stick if able to walk. Looking at the relevant guidance and understanding the information provided by these groups, one of the main issues faced was to be able to reach certain aspects like payment points on the chargepoint and accessing the charging mechanism itself, which may not always be next to the space. Also identified was that the space around the vehicle to move freely is not always adequate. There are often wheel stops for vehicles in the space to ensure the vehicle doesn't collide with the
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	relevant standards and guidance, such as PAS1899. RAC Study found that 61% of Disabled People would consider buying an electric vehicle only if charging was made 'more accessible'.	deter users away from the spaces. Mobility Impairments Heavily impacted by lack of infrastructure to support them at charge point locations. In particular, for one of the activities carried out, many of the users with mobility impairments had either a Wheelchair and Mobility Scooter and used a Walking frame or stick if able to walk. Identified that the space around the vehicle to move freely can't always be adequate. The wheel stops for which ensure the vehicle doesn't collide with the infrastructure, was also seen as a barrier to access the payment machines, with wheelchair users sometimes unable to fit between the barrier	Annex A in the PAS1899 Design Guide is made up from the findings of the report, detailing what level of engagement has been carried out and who with. The User Engagement Report carried out by Motability is key in understanding what requirements are needed for disabled people - User-Engagement-Report_Accessible-EV-Charging_Motability_FINAL.pdf. This document shares the insights, experiences and views of disabled people and should form a baseline when designing the on-street infrastructure. 10,000 Motability Scheme customers	infrastructure, this is also seen as a barrier to access the chargepoint, with wheelchair users sometimes unable to fit between the barrier and the chargepoint. With this as an issue, the surface surrounding the infrastructure wasn't always great, either consisting of grass banks which can be muddy and inaccessible along with bark chippings too. Visually Impaired or Hearing Impairments There is limited feedback on these specific disabilities, due to needing the required vision or hearing to drive a vehicle on the road. In general, infrastructure that is installed could affect visually impaired people who may be walking in the area or are passengers of vehicles. Considerations to avoid issues could include
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		and the machine, or even the charge point itself. With this as an issue, the surface surrounding the infrastructure isn't always great, either consisting of grass banks which can be muddy and inaccessible along with bark chippings too. Sensory Impairments Vision & Hearing – these groups will be unlikely to hold a driving license however, signage should conform to relevant standards and be easy to read and understand for all users.	were contacted about sharing their views for this particular engagement. Out of the 809 that showed an interest in participating, 184 potential participants were selected for the User Engagement research activities. The final number of participants that fed information was 87. RAC Study carried out by Urban Foresight with the article published in July 2022 - Inaccessible Charging is Barrier to Electric for Disabled and Older Drivers RiDC	using tactile paving or coloured surfaces where there could perhaps be a drop off in the kerb to access the chargepoint.
Sex	Having investigated sex as a protected characteristic when trying to understand the impact EV charging can have, there was little to no evidence to suggest this is either neglected or impacted. The Greater Manchester residents Demographic profile was consulted, to see what	As stated, possibly the lack of security could deter usage. Poor infrastructure such as inadequate lighting could also	ONS Census Data 2021 - Sex - Census Maps, ONS	Both Male & Female however, more Females feel unsafe with the lack of certain infrastructure for safety.

	data there is in GM relating to sex that may have relation to EV charging. From the 2021 ONS Census Data, there is an almost equal split between the two of Male & Female, 49% to 51% respectively. An interesting observation however was that from the TfGM TRADS Survey 2022, Women make 7% more journeys than Men per Weekday however these trips are more likely to be made by active travel or bus, rather than driving, which would indicate Men are more likely to be driving. One thing to note when installing EVCI is security, as Women are less satisfied than Men with their personal security, the TfGM Network Principles Survey 2023 tells us. Understanding the impact of this, a good level of security measures like CCTV should be in place however, this impacts both genders and is a general Health & Safety (H&S) measure that should be implemented against the relevance guidance and legislation. This has been added to Section 5. A news article in the source speaks more about the vulnerability women face, especially at night, when charging their EV alone publicly.	have a negative impact and deter women, or even men, from usage.	TfGM TRADS_2022_Summary_Report Women don't feel safe charging their electric cars at night Metro News	
Gender Reassignment	No existing barriers of EV infrastructure could be identified relating to Gender Reassignment.			
Race/ Ethnicity	No limitations of EV infrastructure come down to Race/Ethnicity. Greater Manchester has a very diverse population, as the ONS Census 2021 tells us. From all the statistics that come from race and ethnicity, the much more significant one in relation to EVCI was regarding language. The 2021 Census tells us that at least	For those whom English is not their first language, this could be a barrier when trying to charge their EV due to understanding	ONS Census 2021	Representatives from different nationalities within the Greater Manchester area.

	91 different languages were spoken as a main language in GM in 2021. 42 of these languages had more than a thousand speakers living in Greater Manchester. This could be an indication that some EV users first language may not be English.	instructions and signage.		
Religion/ Belief	No existing barriers of EV infrastructure could be identified relating to Religion/Belief. We understand however that 6% of residents report that accessing a place of religion reported any difficulty of getting there (Source: Access & Inclusion 2020). This is something to note when considering the strategic placement of EV charging although, the main aim of LEVI is to provide on-street EV charging outside homes.			
Sexual Orientation	No existing barriers of EV infrastructure could be identified relating to Sexual Orientation although, we understand the current GM data from the 2021 Census and know the mix of sexual orientation amongst residents.			
Pregnancy & Maternity	No existing barriers of EV infrastructure could be identified relating to Pregnancy & Maternity although, we understand the challenges faced by transport users who are Pregnant in terms of mobility and safety. Although there are limited articles and resources to highlight the issues faced, we would expect the relevant infrastructure both for mobility and safety to be installed.			
Socio-economic & Other (e.g. communities living in rural areas, armed forces, people with poor literacy)	The dataset in Figure 1 of the Appendix is a study represented on the ONS, showing the barriers for those surveyed regarding 'Reasons for not switching, petrol, diesel or hybrid drivers who were unlikely to switch to all-electric vehicles in the next decade, Great Britain, September 22 to October 3', in 2021. For the North West, over half of those residents surveyed stated that a lack of infrastructure was a reason preventing the switch to an all-electric vehicle – Please see Appendix, Figure 1. As well as the supply for infrastructure, an area's disposable income is a key factor when understanding EV ownership. The 2021 ONS	Ensuring all areas of GM have access to EVCI is key for the funding of this project. As the ONS 2021 Census data shows, plug-in vehicle ownership is more common in areas with more disposable income. It would be easy to supply areas that are more commercially attractive however, providing the	The paper 'Mandolakani & Singleton, March 2024' details that 'EV owners are disproportionately male, high-income, highly educated homeowners with more household vehicles', referencing to the paper Hardman et al. 2021. Although this paper was conducted in the USA, we must still	The main user that is currently affected by lack of provision would be residents who don't have access to off-street parking in areas that aren't necessarily commercially viable for a charge point to make a profit for a CPO. This could be in more rural parts of Greater Manchester where housing is less dense than further towards the city centre, or perhaps in areas where EV uptake is

	data shows the disparity between gross disposable household income and EV ownership per household. As the below shows, the more disposable income, the more likely you are to have an EV – Please see Appendix, Figure 2 to 7. Expanding on the above, Random examples were chosen in GM (the Boroughs of Bolton & Stockport) to represent GM in comparison to two boroughs in Greater London, again chosen at random (Hounslow & Lambeth) to represent two other boroughs in the capital. These examples depict the positive correlation between GD Household Income and EVs per household, suggesting that having more disposable income can influence EV uptake. Even looking at an area where lack of infrastructure isn't necessarily viewed as much of a significant issue when compared to the North West, areas in the West Midlands (Lichfield & Tamworth) still experience a similar issue to GM in terms of not having as much disposable income to other areas of the country, which effects the EV uptake per household. An extract from the Transport Focus report 'Plugging the Gap' states 'Electric vehicle users experience occasional faults themselves. But they also see first-hand, on apps or online,	infrastructure before EV uptake has been established in certain areas could be seen as removing a potential barrier. The study on barriers preventing residents from switching to all-electric vehicles is heavily influenced by not having adequate infrastructure. This funding will allow GM to create a large supply of that infrastructure, so residents are more likely to make the choice of switching, as this barrier should be eliminated. Existing barriers listed out in this report include faults with charge points, dependency on an app and customer	understand what the more 'commercially-viable' proposition is and serve those areas that may not see the amount of EV attention the more attractive areas will experience. To understand if this paper holds any substance against UK demographics, the ONS 2021 survey was used to provide an insight into the actual facts and figures this country/GM experiences with EV amongst particular demographics.	relatively low when compared to other areas.
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	faults that were reported months earlier that have not been addressed (or are not confirmed as having been addressed). Another issue raised mentions that ‘On customer support, a key observation is that the roads and the charging infrastructure are usually available 24 hours each day – but the customer support often isn’t’. From the data, the issue back in 2021 didn’t necessarily lie with the amount of charge points, but was more to do with their availability. The issues are with the actual provision of the infrastructure itself, rather than effecting a particular group as such. The issues that users have with charge point infrastructure effect many of the population and spread over into other categories like disability. This most likely stems from the rather new introduction to the public and still experiencing teething issues. From what is available, especially with the new regulations (Public Charge Point Regulations 2023 guidance - GOV.UK), this looks to address certain issues which have come to light throughout the introduction of EVs.	support all fall within the reliability issues. App dependency for many customers may be seen as a barrier due to the perhaps complexity against the ease of contactless payment.	Transport Focus’ 2021 report titled ‘Plugging the Gap’ explores driver’s experiences with EVs in Britain. The Public Charge Point Regulations 2023 aim to address some of the issues that were raised when carrying out the surveys, such as Pricing Transparency, 99% Reliability and Helpline Availability. The KPIs set out in the contract for LEVI ensures that the regulations are met, which has the potential to	
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			eliminate most barriers associated with charge point infrastructure.	
Marriage/ Civil Partnership	No existing barriers of EV infrastructure could be identified relating to Gender Reassignment.			

Section Three – Engagement and Consultation Plan

Click the drop-down to show/hide more context and guidance

The data and evidence gathered in the Baseline Assessment (Section Two) will have highlighted which groups of people are likely to be the most affected by changes implemented through the delivery of your proposal.

It may have also identified where there are evidence gaps in our knowledge and understanding of the existing circumstances.

The extent of engagement/ consultation required will depend on the nature of your proposal and whether there has been any previous engagement activities with the groups who will be impacted. If you're unsure what level of engagement is required, speak to the Partnerships, Engagement and Inclusion (PEI) team. They can also help to identify representative groups and Equality Panels to assist with your engagement.

It is important to have accessible engagement and consultation activity. Inaccessible engagement can result in a narrower range of perspectives being heard, which could amount to discrimination.

FAQs

Q: What things should I consider when planning engagement and consultation activity?

A: Considering your audience and tailoring your approach, to suit their needs, can reduce barriers to participation and create an inclusive experience. Engagement or consultation activity should be proportionate to the scale of your proposal. You should also consider the geography of your proposal and identify local groups to engage with, where appropriate. Guidance on accessible engagement can be found in the [Model of Community Engagement](#).

Q: What things should I consider when promoting engagement and consultation activity?

A: You should consider if the opportunities are reaching your audience? Have you provided sufficient information for your audience to understand what is being asked? Has enough time has been given for your audience to plan their involvement? Refer to section 2J in the [Model of Community Engagement](#) for further details.

Q: Where can I find information on previous engagement and consultation activity?

A: The [EqIA tracker](#) is a useful resource for finding any previous relevant engagement and consultation activity, that may be able to inform your proposal.

Engagement Log & Data Gathering

It’s helpful to keep a record of engagement activities and the groups/ contacts you’ve engaged with. For infrastructure projects, this may be captured in a separate engagement log. Linking to this engagement log, or including summary details below, is helpful context for your reviewer.

You may also find it useful to include a link to any summary notes from engagement sessions, to refer back to as the proposal develops.

If additional research is being undertaken to support your EqIA, in place or inclusive of engagement, this can be detailed here also. Please link to any relevant documentation.

Results and feedback gathered through engagement activities should further inform the baseline assessment in Section One, and act as evidence of the impacts of the proposal in Section Four.

Refer to the [Model of Community Engagement](#) sections 2k for guidance on drafting an engagement plan and 4a for practical guidance on engagement analysis and reporting.

Planned/ delivered activity and engagement method/ Research Activity	Stakeholders/ communities/ demographic groups involved	Timeframe	Link to engagement summary notes (if applicable/ available)
(e.g. online meeting, survey, drop-in)			

Site Selection Plan produced to understand where the LAs require EVCI installations. Spreadsheet includes information from the 10 LAs and TfGM about location details like street address and postcodes, power requirements, number of connectors and other useful information.	TfGM, LAs, DNO, Community Groups, Disability Groups, Other Focus Groups, Residents effected by EVCI installations, CPO (once selected).	Document will be updated until installations commence.	Site Identification, Requirements & Progress.xlsx
Communications & Engagement Plan to understand the level of engagement needed between each stakeholder, when and how. The Comms & Engagement Plan looks at the objectives LEVI sets out to deliver and links this in to how each stakeholder has their role to play in achieving this.	TfGM, LAs, DNO, Community Groups, Disability Groups, Other Focus Groups, Councillors, MPs, Residents effected by EVCI installations, CPO (once selected).	Document will be updated until installations commence.	LEVI-SH-PL-0001.docx
DDRG Presentation	TfGM – Design Disability Reference Group	N/A	Confirmed with PEI Team that DDRG attendance was not necessary, due to scale of EV Infrastructure and Streets for All design guide that was presented at DDRG.
TBC	Bolton	TBC	TBC
TBC	Bury	TBC	TBC
TBC	Manchester	TBC	TBC
TBC	Oldham	TBC	TBC
TBC	Rochdale	TBC	TBC
TBC	Salford	TBC	TBC
TBC	Stockport	TBC	TBC
TBC	Tameside	TBC	TBC
TBC	Trafford	TBC	TBC
TBC	Wigan	TBC	TBC

Identify potential barriers to engagement

Group to be engaged (e.g. visually impaired, older people)	Barriers to participation (e.g. English is not their first language, digital exclusion, would require alternate formats)	How will you combat these barriers? (e.g. produce materials in easy-read, invite BSL interpreter to engagement session, hold in-person meeting)
	Accessibility issues for certain groups to a particular venue or area. Inability to understand what is being discussed through either sight or hearing.	Understand participating member's needs to accommodate if meeting is taking place in person or online.
Bolton – Aging Well		
Bury - Bury2gether, Bury STARS, Speakeasy, Communic8, Bury Hearing Centre, Bury People First, Jigsaw Bury, Persona, Bury Blind society, Bury Autism Partnership Board, Bury Older Peoples Network		
Manchester – Highways Access Group		
Oldham – Action Together		
Rochdale – Rochdale and District Disability Action Group (RADDAG), Action Together/Voluntary, Community and Faith Sector Organisations (VCFSE) Sector		
Salford – SCC's Disability & Links with the Green Agenda		
Stockport – Disability Stockport Transport		
Tameside – Foundations & Jigsaw		
Trafford – None		
Wigan – None		

It is recommended that some level of engagement is carried out for the proposal, even if the impacts seem minimal. However, where recent engagement has been undertaken which can inform the proposal, it may not be necessary to conduct fresh engagement activities.

If consultation or engagement activity hasn't been undertaken with people who may be impacted by the proposal, or is not planned, why not?

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Section Four – Scoping Impacts

[Click the drop-down for more context/ guidance](#)

This is where to detail the impacts of the proposal. Consider the aims of the proposal, what is already known about the current provision (if in place) and any existing barriers (section two), and insights gathered through engagement or additional research (section three).

It is vitally important that this section is completed thoroughly, with a solid evidence base. **Don't generalise, don't merge or group lines, and evidence all of the impacts against each protected characteristic group individually.** Where possible, don't just copy evidence across all protected characteristics.

For each group you have identified in the baseline exercise and engagement plan, set out the positive and negative impacts of your proposal, and the evidence source which sets out how we know this. Consider the entire lifecycle of the proposal when identifying impacts. For example, there may be negative impacts during construction that won't apply once the proposal has been delivered. It is still important to identify these and complete Section Five below with a mitigation plan.

If, once delivered, a proposal unlawfully discriminates on a protected characteristic group, TfGM could face legal challenge regarding the decisions made as a result of the EqIA process. The decision-maker responsible for delivering the proposal should be aware of all equality impacts identified through the EqIA process, and consider how they could positively contribute to the advancement of equality and good relations. They should demonstrate ways they have attempted to prevent or balance potential negative effects that the proposal decisions could have on certain groups through appropriate mitigations.

FAQs

Q: What are the groups within protected characteristics?

A: Groups within protected characteristics define specific people, or groups of people, under the general protected characteristic term. This can be older or younger people within the Age protected characteristic. It is also important to consider intersectionality and how several marginalised identities may impact each other. For example, an older person with a visual impairment may face multiple layers of discrimination/ negative impacts due to both their age and their disability.

Q: What if I identify negative impacts in my proposal?

A: Don't shy away from identifying potential negative impacts, this demonstrates that you have thoroughly considered the impact of your proposal on each protected characteristic group. If negative impacts are identified, they can be addressed through changes to your proposal, or by putting in

place mitigating actions which will promote equality and advance equal opportunities (Section Five). If the proposals negatively impacted on a protected characteristic group, or adversely impacted one group over another and we did not take appropriate mitigating action, we could face legal challenge over the actions taken in the proposal, informed by the contents of our EqlA.

Q: How do I evidence my impacts?

A: You can find evidence through the [EqlA tracker and Insights Database](#), results from your engagement activities, and desktop research.

Age Age groups can be quite wide (for example, ‘people under 50’ or ‘under 18s’). They can also be quite specific (for example, ‘people in their mid-40s’). Terms such as ‘young person’ and ‘youthful’ or ‘older person’ can also indicate an age group. More information on age discrimination - Age discrimination EHRC (equalityhumanrights.com)			
Demographic Group (e.g. older or younger people)	Positive impact of the proposal	Negative impact of the proposal	Evidence source
Older Population (65+)	Providing more for an age group that could see this as a potential barrier to purchasing an EV.	Technology may take some getting used to when comparing to fuelling up an ICE vehicle. Payment methods may be an issue as cash is still used by some of the population. Design of the chargepoint itself may present barriers for older people with mobility impairments, so this group should be taken into consideration at the design stage.	Charging challenges are the main block to UK EV vehicle adoption Inaccessible Charging is Barrier to Electric for Disabled and Older Drivers RiDC
Younger Population of Homeowners (25-34)	Providing for a decent proportion of homeowners in GM that don’t have access to off-street parking.	Could be viewed as ‘clutter’ outside homes. Need to refer to relevant guidance to ensure this does not in-	English Housing Survey - GOV.UK Streets for All Bee Network Powered by TfGM

		fringe on walking and wheeling space on footpaths.	
Disability (Consider physical, sensory and learning impairments e.g. mobility, sight loss, hearing loss, communication challenges, neurodiversity, memory etc. Also be mindful of intersectionality including people with multiple disabilities, e.g. someone deaf/blind will have different access requirements to someone who is deaf.) More information on disability discrimination - Disability discrimination EHRC (equalityhumanrights.com)			
Demographic Group (e.g. sight loss or neurodiversity)	Positive impact of the proposal	Negative impact of the proposal	Evidence source
Mobility	This project should provide the necessary infrastructure that allows people with mobility impairments to seamlessly charge their EV. Listed in Section Two, there are key barriers highlighted that must be addressed in order to bridge the gap.	Without careful consideration, may cause access issues for users either moving around their vehicle or accessing the charge point. Residents should be consulted. As per above, understanding the guidelines for street space will be required to avoid any negative impacts, such as blocking the pavement.	The Motability User Engagement Report - User-Engagement-Report_Accessible-EV-Charging_Motability_FINAL.pdf The Electric Vehicle Accessible Charging (PAS1899) Specification - pas_1889_final.pdf Streets for All Bee Network Powered by TfGM
Neurodiversity	CPOs must have 24/7 support for any customers. Information must be clearly displayed too and there must be pricing transparency. These factors apply for the improved understanding for all EV users, but making the process as easy as possible will hopefully eliminate any confusion and stress when attempting to charge a vehicle.	Should be limited providing all the legal requirements are met. There could be performance issues with reliability which will be monitored throughout the life cycle of the contract with the CPO. If relevant design standards are not met, there could potentially be confusion and stress amongst the user.	Public Charge Point Regulations 2023 guidance - GOV.UK

Vision Impairments	Even though visually impaired people may not be directly impacted, on-street furniture may impact residents trying to navigate around the infrastructure. With reference to the relevant design guidance, EVCI should be installed with this in mind.	If relevant design guidance is not consulted, this may result in potential trip and fall hazards from general infrastructure including cables. Other infrastructure may be required to be installed to prevent incidents like such from occurring, such as tactile paving and cable channels with protective covering.	Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure Streets for All Bee Network Powered by TfGM
Sex Under the Equality Act 2010, sex is understood as binary being either male or female. A person's legal sex is the sex recorded on their birth certificate or their Gender Recognition Certificate. A trans person can change their legal sex by obtaining a Gender Recognition Certificate More information on sex discrimination - Sex discrimination EHRC (equalityhumanrights.com)			
Demographic Group (e.g. male or female)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source
Female	There is no real gender split in terms of housing type, so as the population in GM is almost an equal split, we envisage that following the relevant objectives for LEVI should eliminate any inequalities for gender provision of EVCI within GM.	Infrastructure may lack the adequate facilities for safe charging. From research, women can be deterred from the idea of charging their EV in a poorly-lit environment with no CCTV. We want to ensure that each resident in GM, including women and those who feel vulnerable when charging their car, feel safe to do so and are not put off the idea, especially in an important situation meaning they can use the GM transport network for their journey. Breaking this barrier should see people, especially women, be more confident to drive an EV around GM.	ONS Census Data 2021 - Sex - Census Maps, ONS TfGM TRADES_2022_Summary_Report Women don't feel safe charging their electric cars at night Metro News Streets for All Bee Network Powered by TfGM
Gender Reassignment			

Consider people at all stages of gender reassignment, a person does not need to have undergone surgery to be protected under the Equality Act 2010. Be mindful of intersectionality e.g. the experiences of trans men and trans women may differ.

More information on gender reassignment discrimination - [Gender reassignment discrimination | EHRC \(equalityhumanrights.com\)](https://equalityhumanrights.com/gender-reassignment-discrimination/)

Demographic Group (e.g. trans man or trans woman)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source

Race/ Ethnicity
Race can mean a person's colour, nationality (including citizenship), ethnic or national origins. It also covers ethnic and racial groups e.g. Black British, British Asian, Irish Traveller, Romany Gypsy etc. Consider all racial and ethnic identities, and how these intersect with other protected characteristics e.g. the experience of a gay black male may differ from the experiences of a lesbian white woman.

More information on race/ ethnicity discrimination - [Race discrimination | EHRC \(equalityhumanrights.com\)](https://equalityhumanrights.com/race-discrimination/)

Demographic Group (e.g. Black British or Asian)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source
Residents whose first language is not English	EV Charging will allow more residents from all different backgrounds to feel more confident to purchase an EV.	Users that do not speak English may struggle to understand the infrastructure and technology to charge their vehicle.	ONS Survey 2021

Religion/ Belief
In the Equality Act religion or belief can mean any religion, for example an organised religion like Christianity, Judaism, Islam or Buddhism, or a smaller religion like Rastafarianism or Paganism, as long as it has a clear structure and belief system. The Equality Act also covers non-belief or a lack of religion or belief.

More information on religion/ belief discrimination

Demographic Group (e.g. Jewish or Muslim)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source
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Sexual Orientation
Sexual orientation covers a person's orientation towards people of the same sex, the opposite sex or persons of the same and opposite sex. In the Equality Act, sexual orientation includes how you choose to express your sexual orientation, such as through your appearance or the places you visit.

More information on sexual orientation discrimination - Sexual orientation discrimination EHRC (equalityhumanrights.com)			
Demographic Group (e.g. Gay or Pansexual)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source
Pregnancy and Maternity Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth, and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth, and this includes treating a woman unfavourably because she is breastfeeding.			
More information on pregnancy and maternity discrimination - Pregnancy and maternity discrimination EHRC (equalityhumanrights.com)			
Demographic Group	Positive impact of the proposal	Negative impact of the proposal	Evidence Source
Pregnant Women	Providing more infrastructure for the younger homeowner will cater for those more likely to be pregnant. As research shows that the average age in the UK to get pregnant is between 30 and 34. As we've seen from other research, homeowners between 25 and 34 are more likely to live in a property without off-street parking, so they would benefit from this scheme.	Mobility issues could present a challenge, so using relevant design guidance to ensure that the process of charging is smooth without any strenuous activity. Making sure that cables and any other clutter are neatly stored away preventing any trip hazards.	*Limited articles and data sources from research undertaken Conception and fertility rates - Office for National Statistics Streets for All Bee Network Powered by TfGM Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure
Socio-economic TfGM have adopted the socio-economic duty. This requires public bodies to adopt measures to address inequalities that result from differences in occupation, education, place of residence or social class.			
More information on the socio economic duty - A Practical Guide for Local Authority Implementation of the Socio-Economic Duty in England (resolvepoverty.org)			
Demographic Group (e.g. social class or income status)	Positive impact of the proposal	Negative impact of the proposal	Evidence Source

Residents in lower income areas	Targeting areas that aren't necessarily commercially viable for a CPO to install charge points. This funding will allow the barrier to be eliminated, allowing residents who own EVs in less affluent areas (as per the data suggests) to have access to charge points like other areas do.	Charge points could be installed on streets or in areas where the majority of the general public opposes having chargers outside their house, especially if they don't own an EV themselves. Digital exclusion may be a factor as some residents may not have access to a smartphone or card.	Census 2021 - Over half of younger drivers likely to switch to electric in next decade - Office for National Statistics
Residents without off-street parking	Providing for residents who don't have access to off-street parking. This approach can satisfy multiple residents in the same area. Home charging for residents with driveways is much easily obtainable, through grants and general set up.	There could be issues with mobility if trailing wires and other hazards from the infrastructure are not dealt with. Again, like the aforementioned issue with residents in lower income areas, some residents may not want infrastructure outside their premises.	Local Electric Vehicle Infrastructure (LEVI) funding allocation methodology - GOV.UK Local electric vehicle infrastructure fund - Energy Saving Trust Sources discuss the opportunity for where the EV infrastructure will be delivered.

Additionally, marriage and civil partnership discrimination should be considered where the proposal will impact on TfGM staff.

Marriage and Civil Partnership This is when you are treated differently at work because you are married or in a civil partnership. More information on marriage and civil partnership discrimination - Marriage and civil partnership discrimination EHRC (equalityhumanrights.com)			
Demographic Group	Positive impact of the proposal	Negative impact of the proposal	Evidence Source

Section Five - Mitigations for negative impacts

Click the drop-down to show/hide more context and guidance

We need to demonstrate how the proposal will mitigate against potential negative impacts on protected characteristic groups. These actions need to specifically relate back to the negative impact they're seeking to mitigate.

Consider how the mitigations will be implemented and embedded into your programme of work. For each potential negative impact identified in Section Four, clearly set out the mitigations you will put in place in order to remove or reduce negative impacts on protected characteristic groups.

If mitigating actions are found to be unsuccessful at promoting equality and removing barriers where feasible, TfGM could face legal challenge and/or Judicial Review. Updates against the implementation of mitigation measures need to be recorded as appropriate.

FAQs

Q: When should I review the impacts of my mitigations?

A: As a minimum standard, it's recommended that an EqlA is reviewed 6- and 12-months post-implementation, but it is important that the impacts of mitigating actions are regularly reviewed to ensure we are advancing best practice and continually considering the mitigations and their impacts. These suggested timings will also depend on the scale of the proposal being delivered, so if you're unsure speak to a member of PEI by emailing engagement@tfgm.com

Q: Who is responsible for mitigations?

A: Each mitigating action should have a responsible lead and a timescale for implementation. The responsible lead will have oversight of the delivery of the actions and monitor their success at reducing or eliminating negative impacts. In some instances, it may be that an external contractor is implementing a mitigating action during construction or delivery. In this case, assign a TfGM lead who will be responsible for overseeing the effective delivery of the mitigating action and reviewing it's success at removing barriers or negative impacts.

Negative impact from 'Scoping Impacts' section	Mitigating action and expected outcome (Describe mitigating action required and how it's expected to reduce negative impact)	Responsible lead (Name and role – responsible for	Timescale (Timeframe for when it	Completed (Yes/No)	Update (Any progress updates, around
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above being addressed (Include groups impacted)		implementing the mitigating action)	should be completed)		monitoring and evaluation following, the implementation of proposed mitigations)
Users unable to use or understand the infrastructure	Design guidance is key for the supplier to reference when planning. Key pieces of guidance identified are the PAS1899 (pas_1889_final.pdf), a standard set out by the British Standards Institution (BSI) and co-sponsored by Motability, the national disability charity, and the UK Government's Office for Zero Emission Vehicles (OZEV). This highlights the areas needed for focus, where drivers and passengers who have a disability struggle with standard infrastructure. These are the heights of the various components, usability and manoeuvrability of chargepoint cables, physical connection of a chargepoint and screens or visual interfaces. When designing and implementing infrastructure, CPOs are advised to work with the Local Authorities (LAs) to understand what considerations are required, referencing to relevant standards and guidance, such as PAS1899. Providing a 24/7 neurodivergent friendly customer support to customers will mitigate any confusion as the CPO will be able to clearly explain to the customer how to use the chargepoint.				

	Clear signage should be installed around the premises, using universal symbols.				
Disability	Referring to the Greater Manchester Streets for All Design Guide would mitigate any accessibility issues for pedestrians and users for EVCI. This guidance is set for planners of infrastructure design to consider the relevant measurements for shared space on such infrastructure like footpaths. Looking at such documents like UK government partners with disability charity to set standards for electric vehicle chargepoints - GOV.UK in conjunction with pas_1889_final.pdf should advise designers to consider all forms of impairment and implement ways to mitigate any negative impacts.				
Anti-social Behaviour	CCTV cameras to be installed at sites to constantly understand any potential issues and harm to infrastructure or EV users at sites.				
Pricing	To consistently check that the pricing tariffs on the network are competitive and in line with those across the UK.				
Paying for Charging	Alternatives ways to pay to be discussed as some users may not be able to pay via card or app. More information is listed on how users can pay in the Technical Specification.				

	Each chargepoint unit must provide visual instructions for payment/access (as appropriate) and equipment operation, whether on the charging equipment, on a customer smart device, or on signage accompanying the equipment.				
Older People	Design guidance is key for the supplier to reference when planning. Key pieces of guidance identified are the PAS1899 (pas_1889_final.pdf), a standard set out by the British Standards Institution (BSI) and co-sponsored by Motability, the national disability charity, and the UK Government's Office for Zero Emission Vehicles (OZEV). Referring to the Greater Manchester Streets for All Design Guide would mitigate any accessibility issues for pedestrians and users for EVCI. This guidance is set for planners of infrastructure design to consider the relevant measurements for shared space on such infrastructure like footpaths. This will ensure that chargepoint infrastructure is easy to access for the user. They will not be excluded from design and charging their electric vehicle will be stress free as the design will accommodate all users of every age, in terms of mobility and understanding of usage. Payment issues, in terms of users not being able to pay via a card or app, will be				

	mitigated through discussions with the supplier around payment options. The Technical Specification lays out methods to work around cash options for payment, so the user is not deterred from using the infrastructure. With information clearly set out about usage and pricing, this will help migrate users over from the traditional ICE vehicle charging at a fuel station much easier.				
Neurodivergence	Providing a 24/7 neurodivergent friendly customer support to customers will mitigate any confusion as the CPO will be able to clearly explain to the customer how to use the chargepoint.				
Female	Safety is a main concern for women charging their vehicles at an EV chargepoint. By installing CCTV, having a dedicated 24/7 helpline and following relevant design guidance for lighting should help mitigate any safety concerns that female EV drivers may have.				
English Not First Language	Having signage and instructions with universal symbols as well as wording should help users where English is not their first language. There could be discussions around language settings on the user interface, so see how viable this option may be. Symbols should be used at the very least, to help users locate and use the infrastructure.				

Pregnancy	Following relevant design guidance listed throughout should ensure infrastructure is built with this user in mind. Uncomplex layouts that don't require significant strain or effort will help this group of user use the infrastructure well. Examples include having the chargepoint located near to the parking space, along with minimal opportunity for the users to trip over equipment and any infrastructure that could be seen as a potential danger is clearly highlighted.				
Socio-Economic – Lower Income	Making the switch from ICE vehicles to EVs can be financially difficult for most. That's why the operator should look to keep their prices competitive in comparison to other operators around the country. This should ensure little to no users are excluded from charging their EV because of price. Further work is to be carried out with the chosen operator around payment options, to provide for users who do not have a credit/debit card or smartphone.				

Section Six – Sign off

[Click the drop-down to show/hide more context and guidance](#)

An Equality Impact Assessment is a living document so it is important to note that, regardless of sign-off, the EqlA should be regularly reviewed and new information added as the proposal develops and matures.

Once all sections of the EqlA have been completed and reviewed by your PEI contact, the document will be provisionally signed off, subject to future reviews post-implementation.

A lead approver should be made of aware of the EqlA, as well as any proposals and mitigations. They should be a senior lead in the TfGM department delivering the proposal. This person will take responsibility for the contents of the EqlA, and the delivery and implementation of mitigating actions. Your PEI contact will advise and support, providing advice and suggestions to complete a robust EqlA, your lead approver needs to agree to the EqlA and any proposals or mitigations.

Version number	Project stage (For infrastructure projects)	PEI reviewer (Sign and date)	Comments	Has someone senior within the project been made aware of the EqlA, the impacts, mitigations or any significant changes and been sent a copy?
	Tender & Contract Award Stage			☐
	Design Stage			☐
	Installation Stage			☐
	Handover & Commissioning Stage			☐
	Operations & Maintenance Stage			☐

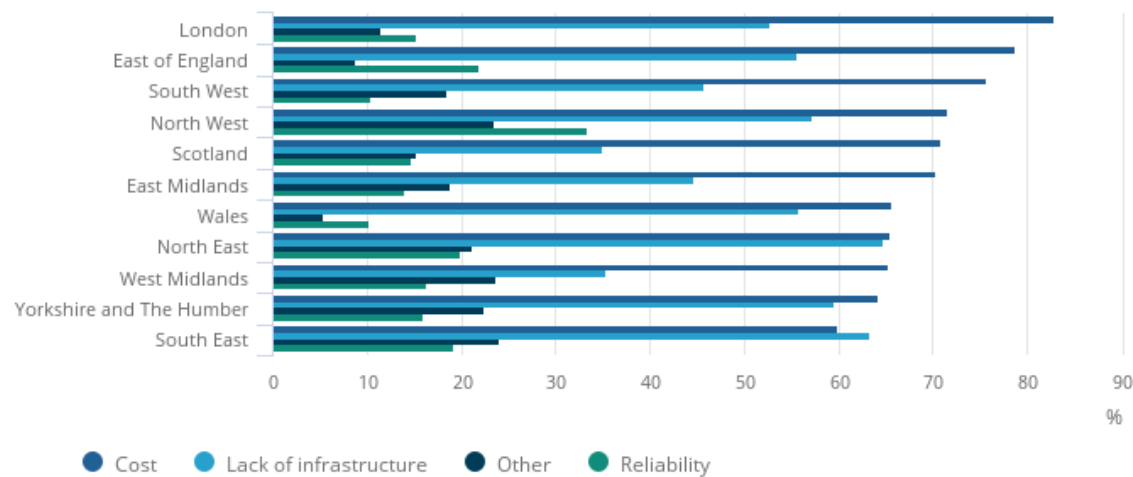
As a minimum, we encourage reviews 6- and 12-months post proposal implementation. This review date will go in the [EqlA tracker](#).

Review stage	Date	PEI reviewer (Sign and date)
6-month review		
12-month review		
Additional review (detail)		

Section 7 – Appendix

Reasons for not switching to a BEV

Figure 1 - [Over half of younger drivers likely to switch to electric in next decade - Office for National Statistics](#) (Reasons for not switching, petrol, diesel or hybrid drivers who were unlikely to switch to all-electric vehicles in the next decade, Great Britain, September 22 to October 3)



In the North West, 57.14% of respondents stated that a lack of infrastructure was a deterring factor when considering the switch to EV within the next decade (2020's).

The below graphs have been included to visualise the differences between Disposable Income and Plug-in Vehicles, per 100 Households.

As stated above in Section Two, as well as the supply for infrastructure, an area's disposable income is a key factor when understanding EV ownership. The 2021 ONS data shows the disparity between gross disposable household income and EV ownership per household. As the below shows, the more disposable income, the more likely you are to have an EV – Please see Appendix, Figure 2 to 7.

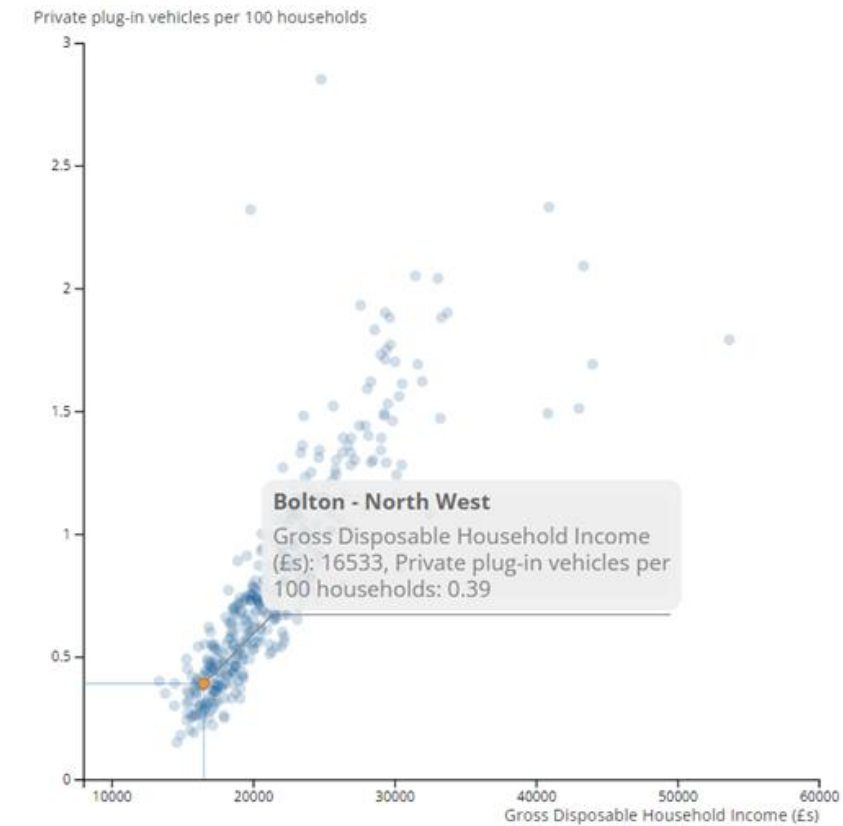
Random examples were chosen in GM (the Boroughs of Bolton & Stockport) to represent GM in comparison to two boroughs in Greater London, again chosen at random (Hounslow & Lambeth) to represent two other boroughs in the capital.

These examples depict the positive correlation between GD Household Income and EVs per household, suggesting that having more disposable income can influence EV uptake.

Even looking at an area where lack of infrastructure isn't necessarily viewed as much of a significant issue when compared to the North West, areas in the West Midlands (Lichfield & Tamworth) still experience a similar issue to GM in terms of not having as much disposable income to other areas of the country, which effects the EV uptake per household.

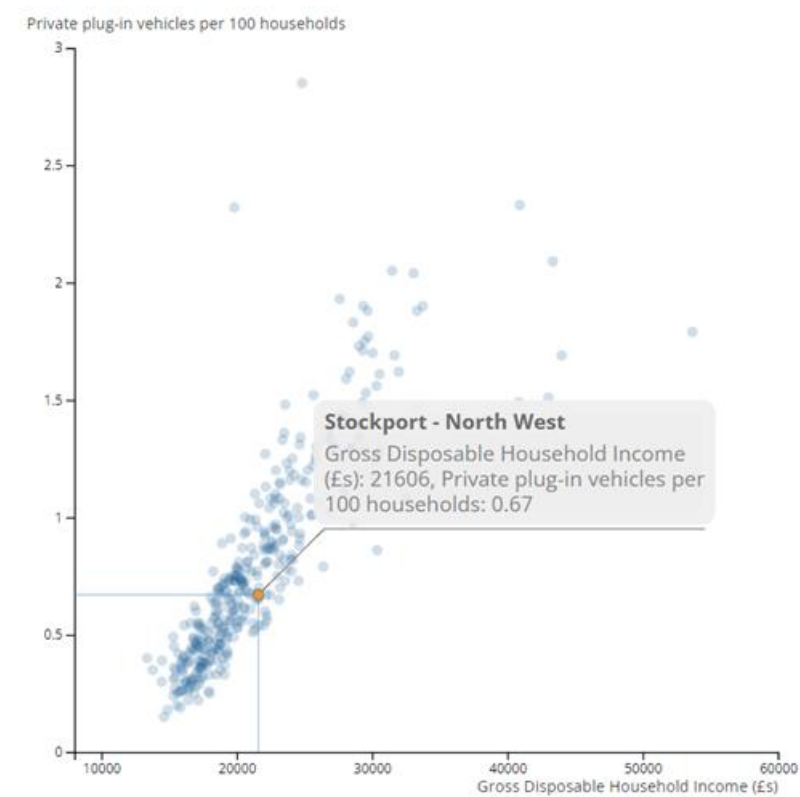
Building on from this, the LEVI scheme looks to supply charging infrastructure across all ten boroughs in Greater Manchester, hoping to somewhat change this 'strong' trend slightly to show that EV uptake does not have to be heavily influenced by disposable income.

Figure 2 – Bolton Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade](#) - [Office for National Statistics](#)



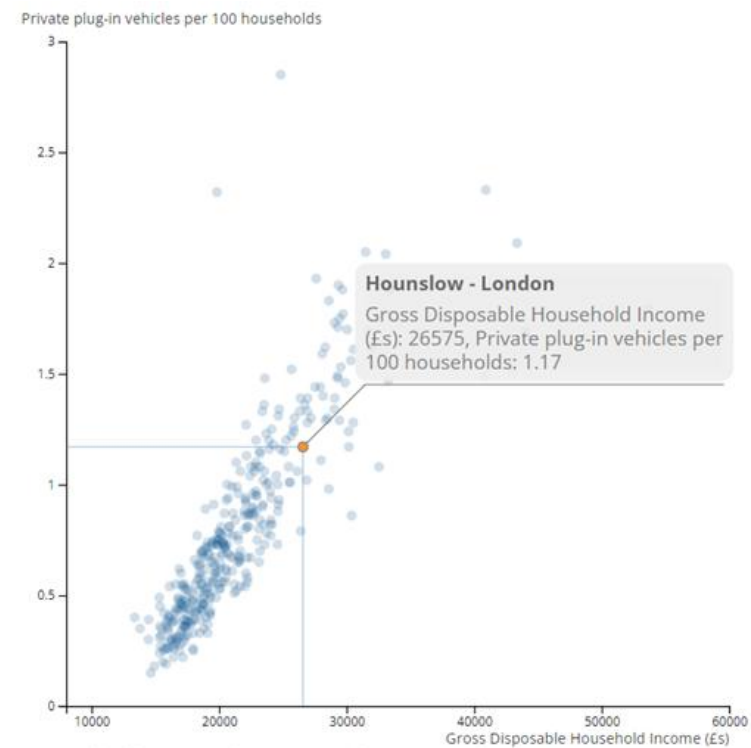
Source: Office for National Statistics, and Department for Transport

Figure 3 – Stockport Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade - Office for National Statistics](#)



Source: Office for National Statistics, and Department for Transport

Figure 4 – Hounslow Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade - Office for National Statistics](#)



Source: Office for National Statistics, and Department for Transport

Figure 5 – Lambeth Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade](#) - [Office for National Statistics](#)

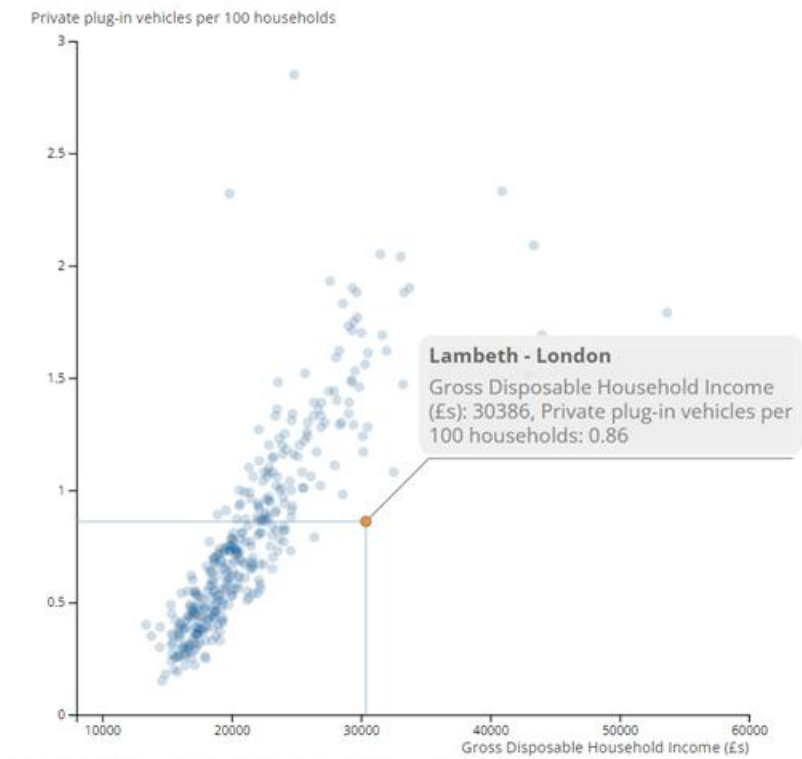


Figure 6 – Lichfield Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade](#) - [Office for National Statistics](#)

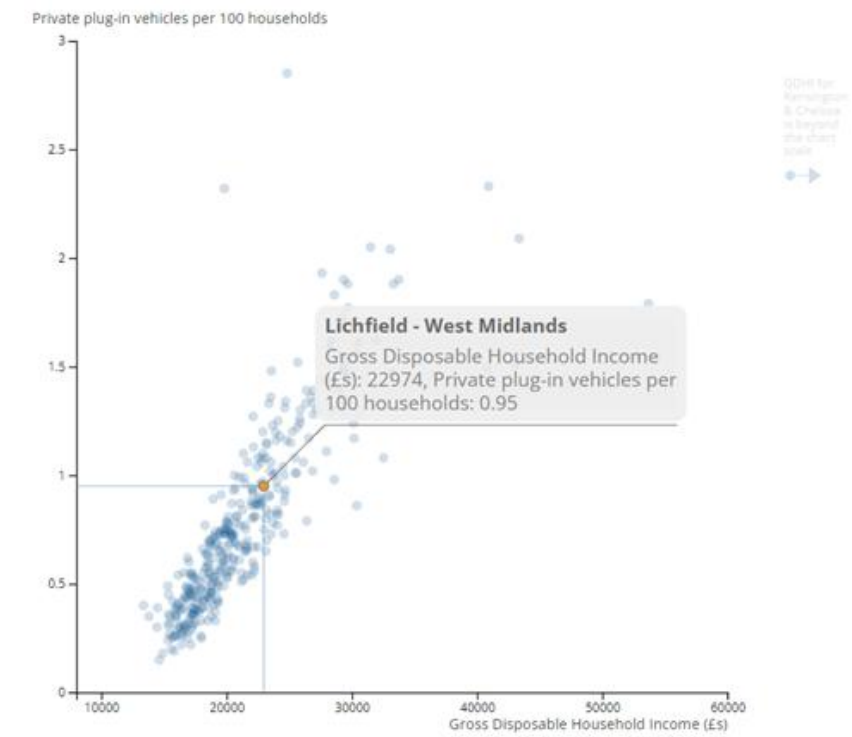


Figure 7 – Tamworth Disposable Household Income against Private Plug-In per 100 Households - [Over half of younger drivers likely to switch to electric in next decade - Office for National Statistics](#)

