

Peninsula Transport and Western Gateway

# Electric Vehicle Action Plan 2024-25





**Peninsula Transport and Western Gateway  
STBs have developed a joint EV Strategic  
Action Plan setting out our role in supporting  
local authorities and leveraging in private sector  
partnerships that will deliver the EV charging  
infrastructure required to support growth and  
zero emission transport in the South West**



# Table of Contents

1.	Foreword .....	<b>4</b>	5.	South West Electric Vehicle Context .....	<b>14</b>
2.	Executive Summary .....	<b>5</b>	5.1	Peninsula Transport Sub-national Transport Body Region .....	<b>14</b>
2.1	Purpose of the EV Strategic Action Plan .....	<b>5</b>	5.2	Western Gateway Sub-national Transport Body Region .....	<b>15</b>
2.2	Areas covered.....	<b>5</b>	6.	Overview of Peninsula Transport and Western Gateway Electric Vehicle Charging Study .....	<b>16</b>
2.3	Role of STBs in EV delivery .....	<b>5</b>	6.1	Key findings and messages .....	<b>16</b>
2.4	Electric Vehicle Charging Study.....	<b>6</b>	6.2	Role of public sector .....	<b>17</b>
2.5	Public sector gap to fill .....	<b>6</b>	6.2.1	Context .....	<b>17</b>
2.6	STB EV Actions .....	<b>7</b>	6.2.2	Public Sector Intervention .....	<b>17</b>
2.7	How we measure success .....	<b>9</b>	6.3	South West EV uptake scenarios.....	<b>18</b>
3.	Introduction .....	<b>10</b>	6.3.1	On-Street Provision .....	<b>18</b>
3.1	Where are we now? .....	<b>10</b>	6.3.2	Demand .....	<b>19</b>
3.2	Summary of work to date .....	<b>10</b>	6.4	Chargepoint Requirements .....	<b>20</b>
4.	Strategic Overview .....	<b>11</b>	6.5	Public Sector Focus .....	<b>20</b>
4.1	The Sub-national Transport Bodies .....	<b>11</b>	7.	South West Challenges .....	<b>21</b>
4.2	The role of the STBs in EV charge point delivery .....	<b>11</b>	8.	Opportunities for STBs to provide strategic leadership .....	<b>22</b>
4.3	Transportation modes .....	<b>12</b>	9.	Actions the STBs will take .....	<b>23</b>
4.4	Scope .....	<b>12</b>	10.	Monitoring .....	<b>24</b>
4.5	Alignment with other strategies and objectives .....	<b>12</b>	11.	Conclusion & Next Steps .....	<b>25</b>
4.5.1	STB policy and strategy .....	<b>12</b>	12.	Glossary (General EV industry acronyms & definitions) .....	<b>26</b>
4.5.2	National policy and strategy .....	<b>13</b>			
4.6	Stakeholder Engagement .....	<b>13</b>			

# 1 Foreword

Sub-National Transport Bodies (STBs) advise the government on the transport priorities for their regions through the publication of transport strategies and strategic investment plans. Peninsula Transport STB is an alliance of five local authorities and Western Gateway STB an alliance of nine, including one combined authority.

Electric vehicle (EV) charging infrastructure is a priority for both Peninsula Transport and Western Gateway, which has led to collaborative working across the South West region.

The two STBs have already set up a South West EV Forum, bringing together stakeholders from across the EV and transport sectors to identify the issues and opportunities in delivering the required infrastructure and electrical grid capacity to meet forecast demand.

In addition to the EV Forums, the STBs have developed a joint EV Strategic Action Plan setting out our role in supporting local authorities (LAs) and leveraging in private sector partnerships that will deliver the EV charging infrastructure required to support growth and zero emission transport in the South West, as well as how we can achieve parity of coverage with the rest of the country.

In developing the Action Plan, the STBs have drawn upon evidence gathered from LAs, other STBs, Distribution Network Operators (DNOs - the organisations responsible for electricity supply), government bodies and independent advisory groups like the Energy Saving Trust (EST) through the EV Stakeholder Forums. Our role also includes engaging with private sector chargepoint operators to understand the opportunities and challenges within the EV industry.

“ The Peninsula Transport board members are united in supporting the Peninsula Transport and Western Gateway STBs EV (Electric Vehicle) Action Plan. This is the next step for the STBs in providing a collective regional voice for the strategic transport and infrastructure needs of the region to boost economic growth.

We welcome the contributions of the EV Action Plan towards advancing the rollout of charging infrastructure required to support growth and zero emission transport in the South West.

This plan comes as part of our wider strategy that sets out four outcomes and a route map to achieving an integrated and sustainable transport network for the peninsula region. ”

**Councillor Mark Coker**  
*Chair – Peninsula Transport*

“ The Western Gateway Sub-national Transport Body is proud to lead the way in advancing the Electric Vehicle (EV) Action Plan, developed in collaboration with Peninsula Transport STB. This initiative is a key step in delivering the charging infrastructure needed to drive zero-emission transport and boost economic growth across the South West.

The plan plays a vital role in supporting the region’s transition to cleaner transport. It aligns with our Strategic Transport Plan and accelerates efforts toward achieving decarbonisation.

By championing this initiative, the Western Gateway STB demonstrates its commitment to sustainable transport and ensuring the South West is ready for a greener future. ”

**Cllr Manda Rigby**  
*Chair - Western Gateway STB*

# 2 Executive Summary

## 2.1 Purpose of the EV Strategic Action Plan

Both Peninsula Transport and Western Gateway STBs identify the transition to zero-emission vehicles as a priority within their respective transport strategies.

The Peninsula Transport Strategy sets out four vision goals, one of which is 'Going Electric', with the commitment to produce an EV Action Plan. The wider objective is to identify the steps necessary to expand the charging network across the peninsula based on the outputs of the joint EV Charging Study.

The Western Gateway Strategy is focused around five key themes, with one of those being decarbonisation and air quality. The STB has committed to working with key stakeholders to provide 55,000 - 75,000 new public charge points for private electric vehicles by 2035 to meet future demand, manage seasonal peaks in travel demand, including provision of electric vehicle charging points, and create a joint EV Strategic Action Plan for the South West.

## 2.2 Areas covered

The EV Action Plan covers the geographies of both Peninsula Transport and Western Gateway STBs and includes the following combined/local authorities:

Cornwall Council
Devon County Council
Plymouth City Council
Somerset Council
Torbay Council
Bath and North East Somerset Council
Bournemouth, Christchurch and Poole Council
Bristol City Council
Dorset Council
Gloucestershire Council
North Somerset Council
South Gloucestershire Council
West of England Combined Authority
Wiltshire Council



## 2.3 Role of STBs in EV delivery

Both Peninsula Transport and Western Gateway STBs are non-statutory bodies, and therefore not directly responsible for the delivery of EV infrastructure. The STBs are however well placed to support LAs by 'speaking with one voice' for the region and communicating collective priorities to government and stakeholders.

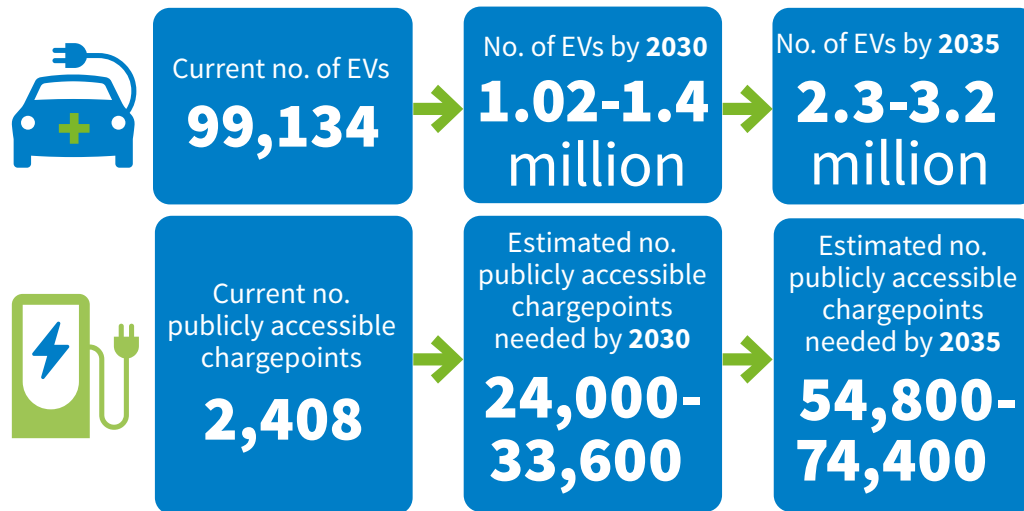
The main purpose of the action plan is to accelerate the delivery of electric vehicle charging infrastructure in the South West, to meet future demand. It specifically identifies how the STBs can add value in addition to the work being undertaken by local transport authorities.

## 2.4 Electric Vehicle Charging Study

Peninsula Transport and Western Gateway STB's joint [Electric Vehicle \(EV\) Charging Study](#), provides an evidence base to support future EV charging policy across the South West region.

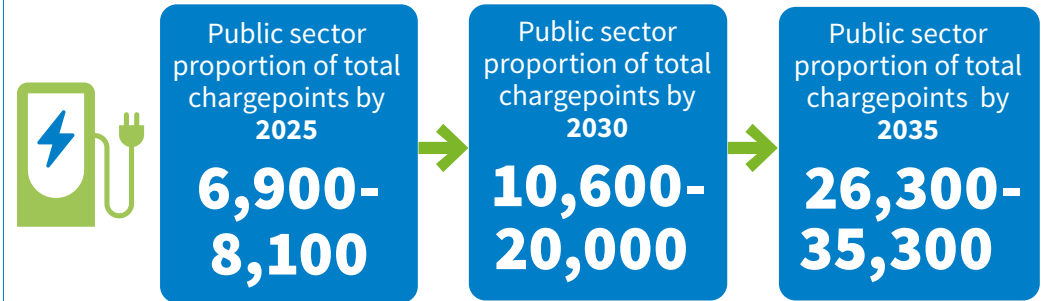
The data from the study helps local authorities to understand **where, how many and what type** of chargers will be required. The study reflects the split between rural and urban demand, seasonal changes in demand and likely areas of private sector investment.

The study uses a model to calculate how EV uptake will grow and the chargepoint requirement in the future. The modelling showed that EV use, and chargepoint infrastructure, is set to accelerate significantly:



## 2.5 Public sector gap to fill

The number of public chargepoints must be able to cope with demand, ensuring that EV users can travel around the South West with the confidence of being able to top up when needed. The total number of chargepoints needed will be provided by both the public and private sector, with the public sector expected to deliver:



A gap analysis was undertaken within the Charging Strategy to identify locations where the private sector will likely leave gaps in the chargepoint network and where the **public sector will need to intervene**:



The main purpose of the action plan is to accelerate the delivery of electric vehicle charging infrastructure in the South West

## 2.6 STB EV Actions

	Action	Tasks/additional info
1	Ongoing facilitation of the South West EV Stakeholder Forum	
2	Ongoing facilitation of the South West EV Officers Forum	STB enabling LAs to share best practice and lessons learnt, to overcome unique SW challenges
3	Communicate issues and opportunities raised in forums to DfT and OZEV	Work with stakeholders through the forums to map out the tangible steps necessary to overcome barriers to delivery
4	STBs to commence direct engagement with CPOs before the end of 2024, to understand delivery challenges and identify how the STB can help bridge any gaps	
5	Work with the rail industry to develop a plan to increase chargepoint provision across the rail station network in the South West	
6	Working with DNOs and IDNOs, explore approaches to identifying 'low powered' chargepoint network capacity gaps	
7	Engage with National Highways and other relevant partners when developing plans for the charging network along major routes, and monitor progress.	
8	Refine Regional Centre of Excellence programme through the STB Business Planning process, to support local authority capacity and capability	

	Action	Tasks/additional info
9	STB to lead engagement with stakeholders, speaking with one voice, to identify mode specific priorities;	<ul style="list-style-type: none"> <li>i. Freight charging, alignment with STB Freight forums</li> <li>ii. Bus/coach - role of EV forums in supporting co-ordination of ZEBRA bids</li> <li>iii. Fleets</li> <li>iv. Rail stations – car park charging facilities</li> <li>v. SRN/MRN charging – partner with National Highways and other relevant partners to ensure regional charging network plans along major routes meet the needs of the South West</li> <li>i. STBs to represent the region on a national level</li> <li>ii. Lead strategic conversations with DNOs and bring stakeholders together to address grid capacity issues</li> <li>iii. Collaboratively find solutions to shared local authority concerns and issues</li> <li>iv. Facilitate the conversation to overcome uncertainty about cross pavement charging – facilitate information sharing between LAs</li> <li>v. STBs to collate and share findings from LA trials of various charging infrastructure to reduce duplication</li> <li>vi. STBs to report back from national STB forum on charging solutions used for different locations and relevant learning from innovation or trials</li> <li>vii. Review and align local and national priorities</li> </ul>
10	‘Filling the gaps’ – facilitation role of STBs and adding value	



	Action	Tasks/additional info
11	Roll out the TfN EV charging infrastructure tool to all LAs	
12	Identify opportunities to align STB workstreams, for example, the Rural Mobility Pilots, to achieve best value	
13	Facilitate the sharing of EV charging information and accessibility standards between LAs	<ul style="list-style-type: none"> <li>i. Ongoing discussions with local authorities and stakeholders to ensure infrastructure is standardised across the region</li> <li>ii. Promote digital accessibility to EVCPI</li> <li>iii. Work with stakeholders such as Motability and EST on sharing research findings and recommendations</li> </ul>
14	Review progress and update Action Plan Autumn/Winter 2025	

## 2.7 How we measure success

The actions set out above will be subject to monitoring and evaluation to demonstrate the impact of STB intervention. Measures are as follows:

- |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>1 High level monitoring and evaluation plan to track growth of EV charging infrastructure using existing sources of data</li> </ul> | <ul style="list-style-type: none"> <li>5 Regional Centre of Excellence impact on local authority capacity and capability – number of officers accessing tools/data and evidence</li> </ul>                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>2 EV Stakeholder Forums – monitor participation and delivery of actions</li> </ul>                                                  | <ul style="list-style-type: none"> <li>6 Provision of charging infrastructure reporting;               <ul style="list-style-type: none"> <li>i. Report CI increase every 2 years (quantity – ZapMap)</li> <li>ii. Monitor the level of funding the South West receives for EVCI</li> <li>iii. Compare regional funding levels against national figures (reasonable/missing out?)</li> </ul> </li> </ul> |
| <ul style="list-style-type: none"> <li>3 Satisfaction survey to key stakeholders</li> </ul>                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>4 Outcome of STB engagement at national level – response to letters/dialogue with OZEV</li> </ul>                                   |                                                                                                                                                                                                                                                                                                                                                                                                          |

# 3 Introduction

## 3.1 Where are we now?

Peninsula Transport and Western Gateway STBs have come together to produce a strategic action plan which identifies tangible measures the STBs can undertake to support the accelerated delivery of regional EV charging infrastructure.

The objective of expanding the charging network across the region is identified within both STBs' transport strategies, which set out regional transport outcomes and communicate investment priorities to government, on behalf of member local authorities and co-opted members.

STBs are ideally placed to support the delivery of the Department for Transport's (DfT) five strategic priorities which include:

- 'delivering greener transport',
- 'transforming infrastructure',
- 'promoting social mobility and tackling regional inequality'; and
- 'better integrating transport networks.'

Supporting the accelerated delivery of regional EV charging infrastructure

## 3.2 Summary of work to date

- Peninsula Transport and Western Gateway jointly commissioned WSP to undertake an EV uptake and EV chargepoint requirements analysis (EV Charging Study) across the South West up to 2050, which can be found here: [Electric Vehicle Charging Study \(South West\)](#)
- Established an EV Officers Group in March 2024, which meets quarterly.
- Facilitated the first south west EV Stakeholder Forum in July 2024.
- Written a joint letter to the Office for Zero Emission Vehicles (OZEV) setting out the barriers to delivery in the South West and how they can be overcome collectively.
- Collaborated with STB network on an electric vehicle charging infrastructure visualiser tool, led by Transport for the North (TfN) STB.





### 4.3 Transportation modes

The Action Plan primarily focuses on accelerating the delivery of EV charging infrastructure for cars. However, it is acknowledged that this is only the first step to achieving a decarbonised, integrated transport network. The STBs support and encourage all work contributing to net zero.

Both STBs are engaging with the freight sector through the [South West Freight Strategy](#) and Forums, which includes maritime and aviation industry stakeholders from the private sector. Decarbonising freight transport is a significant challenge, which will require major investment in fleets and infrastructure.

The STBs role is to communicate regional strategic priorities; however, STBs have limited ability to influence the private sector. The alternative fuel type will also be dependent on mode. The Action Plan will primarily focus on electric charging, however, for harder to electrify vehicles (like HGVs), consideration will be given to alternative fuel options.

For larger vehicles like buses and vans, or small vehicles such as E-bikes where electric charging is appropriate, the STBs are engaging with stakeholders and local authorities to influence outcomes. There are opportunities to expand the membership of the STB EV Stakeholder Forum to include bus and rail operators, with the objective of delivering a more integrated, decarbonised transport network.

### 4.4 Scope

STBs do not:

- Write or submit bid applications for LAs.
- Make regional applications for funds - such as Local Electric Vehicle Infrastructure (LEVI) funding.
- Provide direct funding to deliver infrastructure.
- Focus on E-bike charging.

The STBs do however support all work undertaken by LAs on these topics and are happy to share relevant best practice at the forums.

### 4.5 Alignment with other strategies and objectives

#### 4.5.1 STB policy and strategy

The STBs have produced Strategic Transport Plans setting out priority transport outcomes for their regions:

- [Western Gateway Strategic Transport Plan 2024-2050](#)
- [Peninsula Transport Strategy](#)

Both strategies have a key focus on decarbonising transport and delivering national net zero targets.



DfT have asked all STBs to produce a **Strategic Investment Plan (SIP)**. The STBs undertake an assessment process to produce plans which prioritise the key transport schemes for the region, with support from all local authorities, and strategic partners Network Rail and National Highways. At the time of writing, publication is planned by early 2025 for both STBs.

STB Strategies also considered by the Action Plan:

- [Alternative-Fuels-for-Road-Freight-Strategy](#)
- [South West Rural Mobility Strategy](#)
- [South West EV Charging Study](#)

#### 4.5.2 National policy and strategy

Our shared objective is to support the delivery of DfTs five transport priorities:

- Improving performance on the railways and driving forward rail reform.
- Improving bus services and growing usage across the country.
- **Transforming infrastructure** to work for the whole country, promoting **social mobility and tackling regional inequality**.
- **Delivering greener transport.**
- **Better integrating transport networks.**

As well as the government's five missions, the most relevant of which are:

- Kickstart economic growth.
- Make Britain a clean energy superpower.

Government strategies also considered by the Action Plan:

- [DfT - Taking Charge The Electric Vehicle Infrastructure Strategy](#).
- Government Road to Net Zero [The Road to Zero \(publishing.service.gov.uk\)](#) (Published under Conservative Government)
- Labours plan for Automotive Sector [WR-797\\_23-Automotive-strategy-v8.pdf \(labour.org.uk\)](#)

### 4.6 Stakeholder Engagement

The role of the STBs is to bring together strategic partners in the EV industry including, but not limited to:

- Local Transport Authorities across the South west.
- Energy Saving Trust.
- Distribution Network Operators (DNOs): National Grid and Scottish & Southern Electricity Networks.
- Charge UK.
- National Highways.
- Network Rail.
- Department for Transport (DfT).
- Office for Zero Emission Vehicles (OZEV).
- MPs.
- Other STBs.
- Other LAs outside Peninsula & WG regions.
- Large employers such as NHS, emergency services (fleets).
- Public transport operators.

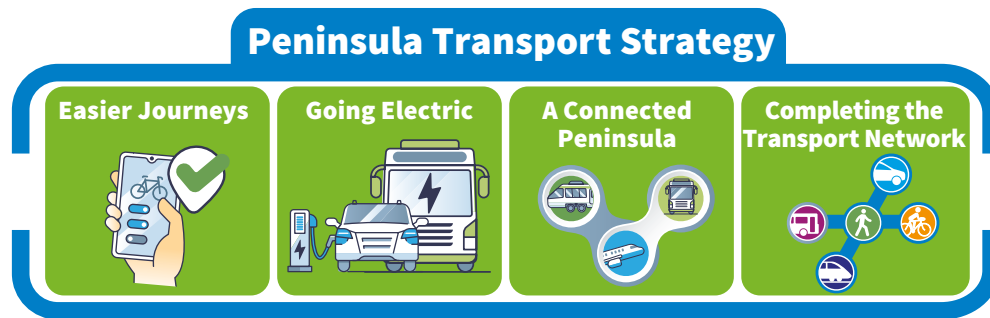
To successfully deliver EV charging infrastructure in the South West, the STBs need to be aware of, and work in partnership with, existing EV networks and forums including:

- South West STB EV forums – LA officer group and wider stakeholder group.
- National STB EV Group.
- Energy Saving Trust workshops/webinars (LAs).
- Ofgem Regional Energy Strategic Planners (RESPs) forum.
- National EV Conferences.
- National Grid DFES (future energy scenarios) forum.
- [Western Gateway pan-regional partnership](#). Aiming to reach Net Zero for South Wales and Western England.
- STB decarbonisation working group.



# 5 South West Electric Vehicle Context

## 5.1 Peninsula Transport Sub-national Transport Body Region



One of the four outcomes of the Peninsula Transport STB Strategy is ‘Going Electric,’ with the objective of expanding the EV charging network (including in rural areas), to meet forecast demand.

All five local authorities within the Peninsula Transport geography have declared a climate emergency, committed to reducing their carbon emissions and increasing the rollout of electric vehicles. Local authorities with older transport plans are refreshing their LTPs to reflect the changing priorities and environmental challenges within transport planning.

A lot has happened in terms of understanding the EV and chargepoint baseline data across the region, as well as securing government funding to facilitate the delivery of a fit for purpose EV charging network and supporting the transition to zero emission vehicles.

A summary of local authority EV headlines across the peninsula (at the time of writing):

Peninsula Transport STB Region					
Local Transport Authority	EV Strategy	ZEBRA Allocation	Indicative Capital LEVI Allocation	LEVI Capability Allocation 24/25	Local Transport Plan Status
Cornwall Council	Yes	£1.3M	£5.5M (includes Scilly)	£206,230	Current version 2022
Devon County Council	Yes	£5.3M	£7M (Approved)	£270,600	Current version 2011, updated plan due 2025
Plymouth City Council	Draft Strategy	£9.5M	£2.4M (Approved)	£167,690	Joint LTP and Local Plan - Plymouth Plan 2019
Somerset Council	Yes	£2.2M	£3.7M	£171,790	Current version 2011, updated plan due 2025
Torbay Council	Yes (not published)	£7.1M	£958K (Approved)	£135,710	Prepared jointly with Devon CC

## 5.2 Western Gateway Sub-national Transport Body Region



In the newly published Western Gateway STB 2024–2050 Strategic Transport Plan, five key themes have been set for the region. Electric Vehicles play a role across all the themes, but particularly for decarbonisation and air quality. Western Gateway STB committed to producing an EV Strategic Action Plan, whilst supporting the nine local authorities in the region and key stakeholders in providing the charging infrastructure necessary to meet the demand.

The nine authorities in the region, all have or are in the process of producing Local Transport Plans and EV strategies. The STB will seek to support the actions and objectives set by the authorities to ensure we are building upon the work being done locally, whilst ensuring we meet our own actions and targets.

Electric Vehicles play a role, particularly for decarbonisation and air quality

A summary of local authority EV headlines across Western Gateway (at the time of writing):

Western Gateway Transport STB Region				
Local Transport Authority	EV Strategy	ZEBRA Allocation	Indicative LEVI Allocation	Local Transport Plan Status
West of England Combined Authority*	Yes	£6M	Capital £6.64M	JLTP5 – in development planned consultation in 2025
BCP	Yes	Zero	£1.447M	Updated joint plan with Dorset Council expected 2025 LTP 2020-2041
Gloucestershire County Council	In development	£6M	£3.107M	<a href="#">Gloucestershire LTP 2020-2041</a>
Dorset Council	Yes	Zero	£2.7M	New joint LTP with BCP expected in 2025
Wiltshire Council	Yes	£3M	£4.36M	Draft LTP4 out to consultation Autumn 2024
North Somerset Council	Yes	£2M	£850K	JLTP5 in development with combined authority, due for public consultation in 2025.

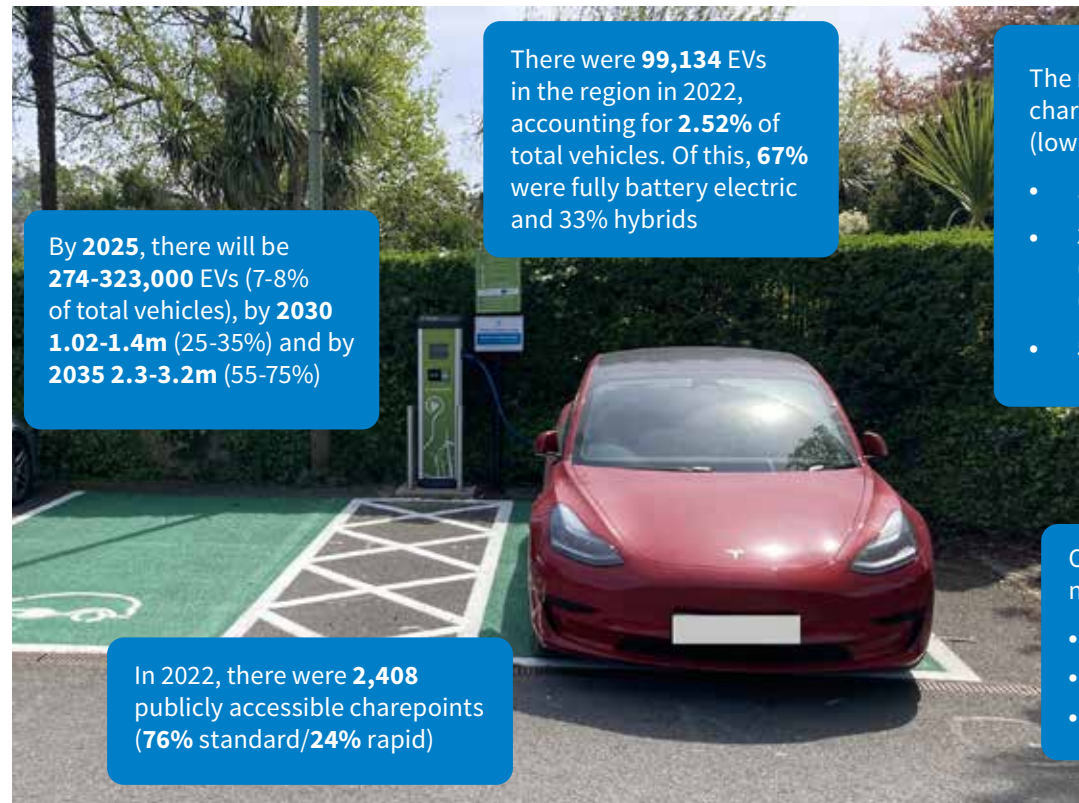
\*West of England Combined Authority includes Bristol City Council, Bath & North East Somerset Council, and South Gloucestershire Council.

# 6 Overview of Peninsula Transport and Western Gateway Electric Vehicle Charging Study

## 6.1 Key findings and messages

A high-level overview of the joint STB EV Charging Study (produced by WSP) is provided below. All data and evidence is taken directly from the study findings (unless otherwise referenced), which can be found here: [South West Electric Vehicle Charging Study](#)

The joint Electric Vehicle Charging Strategy identified the following key findings and messages:



By **2025**, there will be **274-323,000** EVs (7-8% of total vehicles), by **2030** **1.02-1.4m** (25-35%) and by **2035** **2.3-3.2m** (55-75%)

There were **99,134** EVs in the region in 2022, accounting for **2.52%** of total vehicles. Of this, **67%** were fully battery electric and 33% hybrids

In 2022, there were **2,408** publicly accessible charepoints (**76%** standard/**24%** rapid)

The number of publicly accessible chargepoints needed to meet demand (low and high uptake scenario):

- **11,400-13,400** (2025)
- **3,260 (rapid)/20,820 (standard)-4,550 (rapid)/29,060 (standard)** (2030)
- **54,800-74,400** (2035)

Of these, public sector will need to provide:

- **6,900-8,100** (2025)
- **10,600-20,000** (2030)
- **26,300-35,300** (2035)



## 6.2 Role of public sector

### 6.2.1 Context

Both the public and private sectors need to work together to meet the future charge point demand. While the number of local authorities with an EV strategy is rising, few are engaging directly with the private sector due to commercial considerations – which is where STBs can bridge the gap as non-statutory bodies.

The BVRLA Road to Zero Report Card<sup>1</sup> is an annual assessment of the UK's progress towards zero-emission road transport. The 2024 report summarised a range of findings about the EV industry, including:

- Zero emission car sales continue to see growth. While the growth has slowed, it is still strong;
- Although EV prices have reduced for new vehicles since 2023, they continue to be higher than petrol or diesel options;
- Reliability of chargepoints is improving (98.1%) although remains below the government's target of 99%;
- The average cost of using public chargepoints increased by 10% between April 2023 and April 2024 (prices for slow/fast devices rising more than rapid and ultra-rapid charging);
- Charging is more expensive for drivers without access to a private chargepoint – leading to concerns around equity;
- LAs with an EV Strategy rose from 37% in 2023 to 47% in 2024<sup>4</sup> (national). The numbers with dedicated contracts increased from 38% in 2023 to 57% in 2024, likely due to LEVI funding.

Turning to the South West, the percentage of EV owners **with access** to off-street parking remains high. However, as EV sales increase and new buyers enter the market, the demand for on-street charging will grow and include drivers who are reliant on public, on-street charging facilities. During the initial uptake phase, the public sector has a greater role in providing public chargepoints as they may not be commercially viable for the private sector due to low usage and economies of scale.

### 6.2.2 Public Sector Intervention

A gap analysis was undertaken within the Charging Strategy to identify locations where the private sector will likely leave gaps in the chargepoint network and where the **public sector will need to intervene:**

#### Rapid DC Charging

- Majority of rapid chargepoints would be of interest to private sector
- Focus on high traffic routes such as motorways and A roads
- **Public sector focus on town/village centres** (taxis/freight/en-route charging)

#### Standard AC Charging

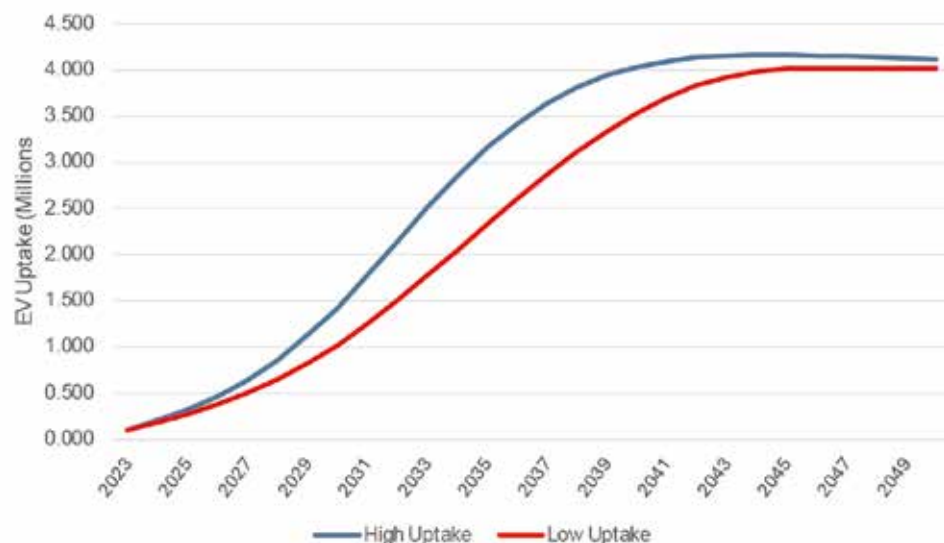
- **Greater proportion will need to be provided by public sector**
- Rural/isolated areas less attractive to private investment



<sup>1</sup> Home-Road to Zero

## 6.3 South West EV uptake scenarios

The EV Charging Study sets out a low and high EV uptake forecast for the region. They contain different assumptions about the level of government intervention and consumer behaviour. The line graph below shows the projected number of EVs in the region up until 2050:



To meet demand, between 24,100 – 33,600 chargers will be required by 2030

### 6.3.1 On-Street Provision

The reliance on on-street parking across the region ranges from 18% to 38%. The study highlighted that reliance on on-street parking is generally low when viewed on a regional basis due to lower urban density and higher levels of rurality:

Local authority	Population	Households	Total vehicles	Average number of vehicles per household	Proportion of households reliant on on-street parking
<b>Peninsula</b>	2,357,500	1,030,700	1,699,740	1.65	25%
Cornwall	570,300	250,500	424,596	1.69	23%
Devon	811,600	352,500	616,084	1.75	23%
Torbay	139,300	63,000	84,082	1.33	28%
Plymouth	264,700	114,600	141,488	1.23	34%
Somerset	571,600	250,100	433,490	1.73	24%
<b>Western Gateway</b>	3,108,300	1,321,100	2,244,332	1.70	26%
Bath and North East Somerset	193,400	79,200	113,170	1.43	29%
North Somerset	216,700	94,600	153,456	1.62	21%
Bournemouth, Christchurch and Poole	400,300	173,800	245,802	1.41	27%
Dorset	379,600	169,300	296,528	1.75	18%
Gloucestershire	645,100	279,400	456,414	1.63	25%
Wiltshire	510,400	215,100	444,799	2.07	22%
City of Bristol	472,400	191,600	229,284	1.20	38%
South Gloucestershire	290,400	118,100	304,879	2.58	25%
<b>Total</b>	<b>5,465,800</b>	<b>2,351,800</b>	<b>3,944,071</b>	<b>1.68</b>	<b>25%</b>

Urban areas understandably have a higher proportion of households reliant on on-street parking, particularly Bristol, Bournemouth, Plymouth and Gloucester. Other areas with notably high reliance are Bath, Cheltenham and Exeter.

For a detailed breakdown of on-street charging statistics by LA (outside of the STB EV Study findings), Field Dynamics provide publicly accessible chargepoint data here: [On Street Charging](#)

### 6.3.2 Demand

To build an effective public EV charging network, it is important that chargepoints are installed where there is **demand from drivers**. To calculate demand, charging demand at three different stages of a journey are considered: **origin, on-route and destination**:

#### Origin

- At present most EV owners (93%) have domestic off-street charging facilities.
- As EV uptake increases, there will more EV drivers who depend on public residential charging and demand will rise.

#### Destination

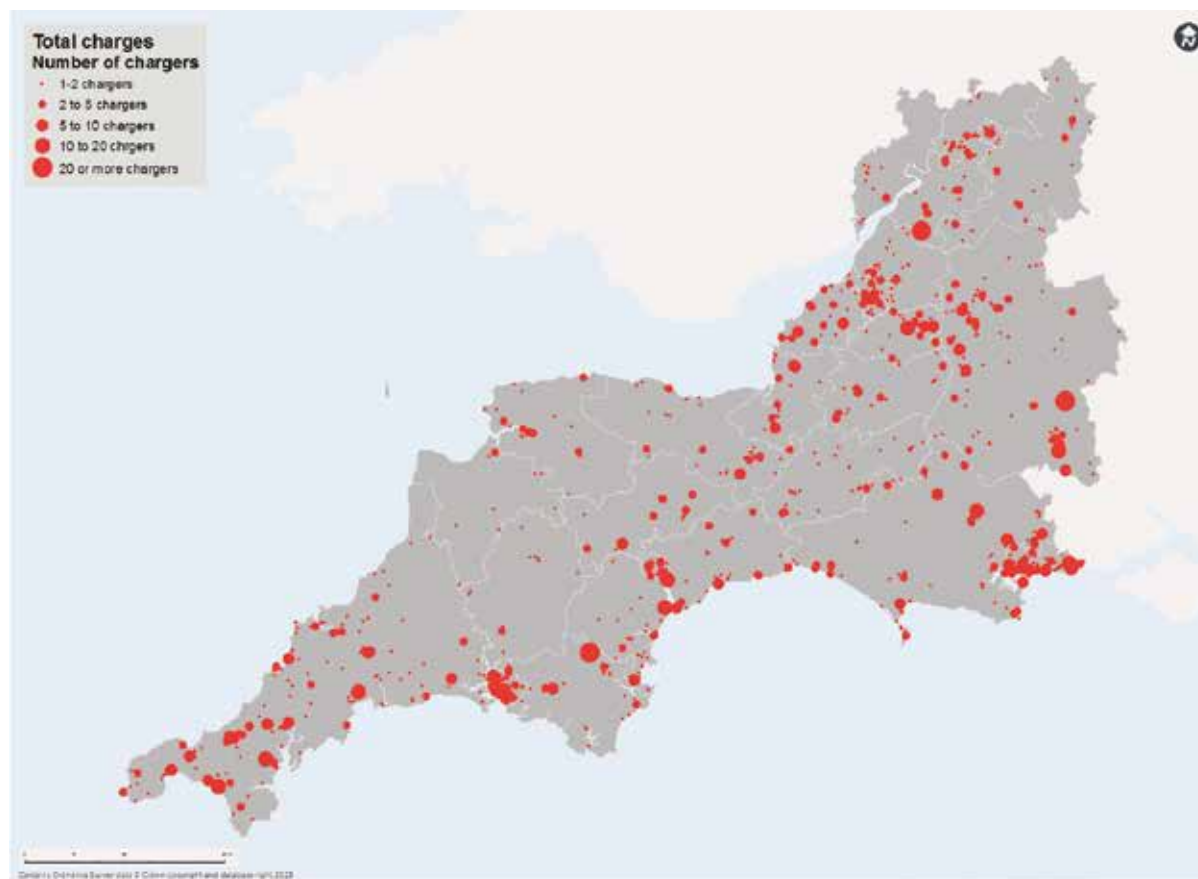
- Destination charging occurs when driver's 'top-up' whilst parked at the destination of their journey.
- Shopping centres, railway stations and leisure sites.

#### En-route

- Demand is greatest along the strategic and major road networks (SRN and MRN). South West requires investment in en-route rapids on MRN due to lower density SRN.
- Rapid charging infrastructure most effectively applied as close to the high demand road links as possible.
- Ideal locations are motorway service stations or other land adjacent to major roads.

Whilst the priority is to install chargepoints in the areas of highest demand, it is also important to create a **network of chargers** across the region.

The following map, taken from the study, highlights geographic clusters of chargepoints, focused on higher population densities. It is clear to see where there are currently large, rural charging deserts.



## 6.4 Chargepoint Requirements

To meet demand, between **24,100 – 33,600** chargers will be required by 2030. Whilst the private sector will provide a proportion of the infrastructure required in the region, the public sector will need to intervene to **fill gaps in the public network**.

The following graph sets out the anticipated split between rapid and standard chargers required by 2030:



The STBs will continue to work with LAs and stakeholders to gain an understanding of the future demand for the region and ensure that all users and journey purposes are recognised (e.g. leisure and commuter traffic both addressed).

## 6.5 Public Sector Focus

Peninsula Transport and Western Gateway STBs have identified the following areas for public sector consideration when planning EV charging infrastructure:

- Equitable access to chargepoints, especially on-street provision;
- Accessibility of chargepoints (PAS1899 [Accessible EV charging standards](#); PAS1899 - [Energy Saving Trust](#));
- Charging solutions for public sector fleets e.g NHS vehicles, council refuse vehicles.
- Suitability of public chargepoint infrastructure for vans and passenger vehicles – future proofing assets;
- Bringing together public and private sectors to deliver a network of chargepoints where they are needed;
- Signal levels of investment required to bridge the gap left by private sector delivery;
- Integration between local transport and planning authorities to deliver infrastructure where it is needed and to leverage private sector investment (e.g. S106/CIL).



# 7 South West Challenges

A summary of key challenges facing the region include :



- High visitor numbers placing **seasonal strain** on networks (South West most visited region in the UK) – commercial challenges in providing chargepoints for peaks in tourist demand;
- High reliance on the car for transport;
- Low proportion of Strategic Road Network, en-route charging challenges and funding gaps;
- Government funding for electric vehicle infrastructure targeted towards urban areas – risk **rural areas are left behind**;
- **Grid capacity**, grid upgrade challenges/costs, response times from DNOs;
- Resourcing, variable knowledge and financial constraints within local transport authorities and STBs, as well as wider public sector;
- Within Peninsula Transport region, high proportion of business population is rural;
- Resilience of network, vulnerable to impacts of climate change.
- Protecting and preserving the unique landscapes of the South West;
- Inconsistent provision of en-route charging stations on strategic road network (SRN). Good in urban areas but south of region has poor SRN connections;
- Commercial viability;
- High percentage of ‘through traffic’ as Western Gateway hosts main road corridors from South Wales to London.

# 8 Opportunities for STBs to provide strategic leadership

The DfT asked STBs to develop Transport Centres of Excellence (CoE), with a focus on building local authority capacity and capability and providing strategic support. EV charging infrastructure has been identified as a priority within both Peninsula Transport and Western Gateway transport strategies and is a focus of the regions CoE offering. To support local authorities, we will:

- Work in partnership with national network of STBs to develop the Common Analytic Framework (CAF) and ensure that we, as smaller STBs, **take advantage of the shared learning and resources** available and cascade tools/analysis to local authorities.
- One output of the CAF is the **Electric Vehicle Charging Infrastructure Tool** developed by TfN. We will roll out the tool to member authorities and provide training on functionality. The tool will help local authorities identify priority areas for charging infrastructure, supporting local decision making.
- Via the EV Stakeholder Forum and EV Officer Group, **identify opportunities for pilot projects** across the region. This will also include the development of innovative solutions, working in partnership with government and industry experts.

- **Bring together public and private organisations** to share knowledge, overcome barriers and bridge the gap between commercial and public sector chargepoint delivery to encourage collaborative working.
- Identify possible collaborations between local authorities and the private and third sectors;
- Highlight South West EV priorities and levels of investment to government via STB Strategic Investment Plans.
- Support local authorities by developing a strategic narrative for regional EV investment, supplementing bid submissions.

STBs are uniquely placed to speak with one voice for their regions. Due to the complex stakeholder matrix for EV infrastructure delivery, we will communicate issues and opportunities to government to ensure a network, rather than local authority boundary approach.

We will continue to explore regional opportunities by bringing together stakeholders like NHS/care sector/ tourism/education/emergency services and other large employers, to:

- Encourage collaboration on a regional level of EVCPI provision; and
- Research or report any findings to the EV Forums.

# 9 Actions the STBs will take

## Taking into consideration the previous evidence, the following STB actions have been identified:

- 1** Ongoing facilitation of the South West EV Stakeholder Forum.
- 2** Ongoing facilitation of the South West EV Officers Forum;
  - STB enabling LAs to share best practice and lessons learnt, to overcome unique SW challenges
- 3** Communicate issues and opportunities raised in forums to DfT and OZEV;
  - Work with stakeholders through the forums to map out the tangible steps necessary to overcome barriers to delivery
- 4** STBs to commence direct engagement with CPOs before the end of 2024, to understand delivery challenges and identify how the STB can help bridge any gaps.
- 5** Work with the rail industry to develop a plan to increase chargepoint provision across the rail station network in the South West.
- 6** Working with DNOs and IDNOs, explore approaches to identifying 'low powered' chargepoint network capacity gaps.
- 7** Work with the EST to represent regional issues to the DfT and identify opportunities for collaboration.
- 8** Refine Regional Centre of Excellence programme through the STB Business Planning process, to support local authority capacity and capability.
- 9** STB to lead engagement with stakeholders, speaking with one voice, to identify mode specific priorities;
  - Freight charging, alignment with STB freight forums.
  - Bus/coach - role of EV forums in supporting co-ordination of ZEBRA bids.
  - Fleets.
  - Rail stations – car park charging facilities.
  - SRN/MRN charging – partner with National Highways and other relevant partners to ensure regional charging network plans along major routes meet the needs of the South West.
- 10** 'Filling the gaps' – facilitation role of STBs and adding value;
  - STBs to represent the region on a national level.
  - Lead strategic conversations with DNOs and bring stakeholders together to address grid capacity issues.
  - Collaboratively find solutions to shared local authority concerns and issues.
  - Facilitate the conversation to overcome uncertainty about cross pavement charging – facilitate information sharing between LAs and relevant stakeholders.
- STBs to collate and share findings from LA trials of various charging infrastructure to reduce duplication.
- STBs to report back from national STB forum on charging solutions used for different locations and relevant learning from innovation or trials.
- Review and align local and national priorities.
- 11** Roll out the TfN EV charging infrastructure tool to all LAs.
- 12** Identify opportunities to align STB workstreams, for example, the South West Rural Mobility Pilots, to achieve best value.
- 13** Facilitate the sharing of EV charging information and accessibility standards between LAs, including;
  - Ongoing discussions with local authorities and stakeholders to ensure infrastructure is standardised across the region.
  - Promote digital accessibility to EVCPI.
  - Work with stakeholders such as Motability and EST on sharing research findings and recommendations.
- 14** Review progress and update Action Plan Autumn/Winter 2025.

# 10 Monitoring

To ensure the STB is achieving the actions set out in this plan, we will undertake the following:

- 1 High level monitoring and evaluation plan** to track growth of EV charging infrastructure using existing sources of data.
- 2 EV Stakeholder Forums** – monitor participation and delivery of actions.
- 3 Satisfaction survey** to key stakeholders.
- 4 Outcome of STB engagement at national level** – response to letters/ dialogue with OZEV.
- 5 Regional Centre of Excellence** impact on local authority capacity and capability – number of officers accessing tools/data and evidence.
- 6 Provision of Charging Infrastructure reporting;**
  - i. Report CI increase every 2 years (quantity – ZapMap).
  - ii. Monitor the level of funding the South West receives for EVCI.
  - iii. Compare regional funding levels against national figures





# 11 Conclusion and Next Steps

The EV Action Plan is a live document, to be reviewed and updated annually. The STBs will continue to align EV outcomes with STB transport strategies, keeping the focus on the user. The STBs will continue to engage with government and highlight the need for national guidance and standardisation of EV charging infrastructure.

## Future areas of work the forum could explore include:

- **Innovation** – supporting projects and sharing learning across the South West.
- **Monitor advancements in EV charging technology** and impact on LAs (where considered appropriate by LAs and STBs).
- **Monitor advancements of other fuel types/solutions** and infrastructure in addition to electrification (where considered appropriate by LAs and STBs).
- **Fleet charging infrastructure** and transition to net zero.
- **Monitor advancements in the charging industry** – longer term vision of public charging infrastructure.
- **Engage with manufacturing stakeholders** to identify further public/private sector engagement opportunities, e.g. gigafactories.
- **End of life/disposal** – chargepoints/vehicles.



# 12 Glossary

## (General EV industry acronyms and definitions)

Abbreviation	Definition	Abbreviation	Definition
<b>AC Charging</b>	The power that comes from the grid is always AC (alternating current)	<b>HGV</b>	Heavy Goods Vehicles
<b>BEV</b>	Battery Electric Vehicle – A vehicle powered by a battery, which can be plugged into an electricity source to recharge. Also known as ‘pure’ or ‘100 per cent’ EVs, they have zero tailpipe emissions.	<b>IDNOs</b>	Independent Distribution Network Operators
<b>CAF</b>	Common Analytic Framework – agreement between STBs for sharing data and tools.	<b>kWh</b>	Kilowatt Hour; unit of electricity. Car batteries are sized in kWh i.e. a 50 kW Kilowatt Hour; unit of electricity.
<b>Chargepoint</b>	A fixed piece of equipment with an attached cable and plug for charging electric vehicles.	<b>LAs</b>	Local Authorities
<b>Chargepoint Hub</b>	A site in which there are multiple chargepoints available for public use.	<b>LEVI</b>	Local Electric Vehicle Infrastructure fund (DfT fund)
<b>Chargepoint Network</b>	Commercial offering of a chargepoint operator (CPO)	<b>LTP</b>	Local Transport Plan; the council’s strategy and policy framework for transport and guide for investment priorities.
<b>DC Charging</b>	The energy stored in batteries is always DC (direct current).	<b>p/kWh</b>	Pence per Kilowatt Hour. Users are charged for each kWh they consume. Charging tariffs are in pence per kilowatt Hour.
<b>DNOs</b>	Distribution Network Operators	<b>Payment by bank card</b>	In line with national regulations, all new Rapid and Ultra Rapid chargers will accept payment via a contactless bank card (credit or debit card). This allows users to access these chargers without joining a Network.
<b>EV</b>	Electric Vehicle; the vehicle is powered by electricity so requires plugging in to recharge the battery.	<b>PHEV</b>	Plugin Hybrid Electric vehicle; combines a smaller battery with a conventional internal combustion engine and an electric motor. This allows an electric range of between 20 – 50 miles and the ability to drive with an empty battery for hundreds of miles using petrol or diesel. Must require direct plug charging of battery or becomes hybrid.
<b>EVCPi</b>	Electric Vehicle Charge Point Infrastructure	<b>ORCS</b>	On-street Residential Chargepoint Scheme.
<b>Fast Chargepoint</b>	A charger rated from 8 kW - 49 kW. They typically charge a vehicle in 2 - 4 hours. This type of charger is useful in locations where a car might be parked for a few hours, like retail parks or restaurant car parks.		

<b>Abbreviation</b>	<b>Definition</b>
<b>Overstay fee</b>	To encourage appropriate use of charging bays and assure they are available for people who need them an overstay fee will apply after a vehicle has finished charging and grace period has been exceeded.
<b>OZEV</b>	Office for Zero Emission Vehicles.
<b>Rapid Chargepoint</b>	A charger rated 50 kW - 149 kW. Depending on the vehicle capability they can charge a battery to 80% within 30 minutes - 1 hour. They are ideal for locations where vehicles will only be parked for short periods, such as motorway service stations.
<b>Standard Chargepoint</b>	A charger rated from 3 - 7 kW. It typically takes 12 - 15 hours to charge an EV to full with this type of chargepoint. These type of chargers are useful in locations where an EV is parked for a long time or overnight.
<b>SIP</b>	Strategic Investment Plan – Document setting out the priorities for transport interventions for each STB region.
<b>STBs</b>	Strategic Transport Plan – A document produced by STBs to provide the transport aims and objectives for each region.
<b>SRN/MRN</b>	Strategic Road Network and Major Road Network
<b>TfN</b>	Transport for the North (STB)
<b>Ultra-rapid Chargepoint</b>	A charger rated above 150 kW. They can charge a car to 80% in as little as 20 minutes. They are often used for on-route chargers, for example at service stations. Only newer, higher specification EVs can use ultra-rapids.
<b>ZEBRA</b>	Zero Emission Bus Funding (DfT fund)

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