Please ask for: Matt Berry
Extension No: 4589
E-mail: mattberry@cannockchasedc.gov.uk

10 July 2024

Dear Councillor,

Cabinet

6:00pm on Thursday 18 July 2024

Meeting to be held in the Esperance Room, Civic Centre, Cannock

You are invited to attend this meeting for consideration of the matters itemised in the following Agenda.

Yours sincerely,

T. Clegg
Chief Executive

To: **Councillors:**

Johnson, T.B.	Leader of the Council
Williams, D.W.G.	Community Wellbeing Portfolio Leader
Wilson, L.J.	Environment and Climate Change Portfolio Leader
Thornley, S.J.	Housing and Corporate Assets Portfolio Leader
Preece, J.P.T.L.	Parks, Culture, and Heritage Portfolio Leader
Freeman, M.A.	Regeneration and High Streets Portfolio Leader
Prestwood, J.	Resources and Transformation Portfolio Leader

Agenda

Part 1

1. Apologies

2. Declarations of Interests of Members in Contracts and Other Matters and Restriction on Voting by Members

To declare any interests in accordance with the Code of Conduct and any possible contraventions under Section 106 of the Local Government Finance Act 1992.

3. Minutes

To approve the Minutes of the meeting held on 12 June 2024 (enclosed).

4. Updates from Portfolio Leaders

To receive oral updates (if any), from the Leader of the Council, the Deputy Leader, and Portfolio Leaders.

5. Forward Plan

Forward Plan of Decisions for July to September 2024 (Item 5.1 - 5.3).

6. Charging Schedule for Monitoring of Legal Agreements for Biodiversity Net Gain Sites

Joint Report of the Head of Economic Development & Planning and the Head of Operations (Item 6.1 - 6.11).

7. Permission to Spend - Swimming Pool Support Fund

Report of the Head of Wellbeing (Item 7.1 - 7.3).

8. Local Electric Vehicle Infrastructure Fund

Report of the Head of Regulatory Services (Item 8.1 - 8.75).

Minutes Published: 17 June 2024
Call-In Expires: 24 June 2024

Cannock Chase Council

Minutes of the Meeting of the

Cabinet

Held on Wednesday 12 June 2024 at 6:00 p.m.

In the Ballroom, Civic Centre, Cannock

Part 1

Present:

Councillors:

Johnson, T.	Leader of the Council
Newbury, J.	Deputy Leader of the Council and Regeneration & High Streets Portfolio Leader
Williams, D.	Community Wellbeing Portfolio Leader
Thornley, S.J.	Housing and Corporate Assets Portfolio Leader
Preece, J.	Parks, Culture, and Heritage Portfolio Leader
Prestwood, J.	Resources and Transformation Portfolio Leader

1. Apologies

Apologies for absence had been received from Councillor L. Wilson, Environment and Climate Change Portfolio Leader.

2. Declarations of Interests of Members in Contracts and Other Matters and Restriction on Voting by Members

No other Declarations of Interest were made in addition to those already confirmed by Members in the Register of Members' Interests.

3. Minutes

Resolved:

That the Minutes of the meeting held on 25 April 2024 be approved.

4. Updates from Portfolio Leaders

(i) **Environment & Climate Change**

The Leader of the Council updated in respect of the following on behalf of the Portfolio Leader:

- **Gambling Policy Consultation**

  The Council's Gambling Policy was out for consultation. It began at the end of May and was due to close on 30 June. All relevant parties had been made aware.

  The main objectives of the policy were:

- Prevent gambling becoming the cause of crime or disorder, being associated with crime, or supporting it.
- Ensuring gambling is conducted in a fair and open way.
- Protecting children and other vulnerable people from being exploited.

Any individual or group interested were encouraged to be involved in the consultation and the links to the policy were on the Council's website.

- **Amendments to Taxi Licensing Policy**

  Minor amendments had been made to the Council's Taxi Licensing Policy using the powers delegated to the portfolio leader and in consultation with relevant senior officers.

  One amendment brought the policy into line with the latest government legislation on the rehabilitation of offenders and other was to correct a minor error in the wording.

- **Appointment of Shared Services Managers**

  Paul Beckley had been appointed as Building Control & Climate Change Manager and David Prosser-Davies as the Environmental Health Manager. Both posts would serve Cannock Chase and Stafford Borough Councils.

5. Forward Plan

Resolved:

That the Forward Plan of Decisions for the period June to August 2024 (Item 5.1 - 5.2) be noted.

6. Recommendations from Scrutiny Committee

Consideration was given to the below recommendations referred from the Health, Wellbeing and The Community Scrutiny Committee held on 18 March 2024:

Recommendations from the Lettable Standards (Empty Properties) and Housing Affordability Working Group:

"That:

(A) Cabinet approve the 'revised offer' of the letting standard as outlined within the report.

(B) The revised offer made is to allocate a decoration pack to properties where no additional decorative works are required to be carried out by Housing Maintenance."

Resolved:

That:

(A) The 'revised offer' of the letting standard as outlined within the report considered at the 18 March 2024 Health, Wellbeing, and The Community Scrutiny Committee be agreed.

(B) The revised offer made to allocate a decoration pack to properties where no additional decorative works were required to be carried out by Housing Maintenance, be noted.

7. Motions Referred from 17 April 2024 Council Meeting

Consideration was given to the Motions referred from the full Council meeting held on 17 April 2024 in respect of 'Bleed Kits' (Item 7.1) and 'Supporting our Armed Forces Community' (Item 7.2 - 7.5).

(i) Bleed Kits Motion

The Community Wellbeing Portfolio Leader advised the following:

- Work was still ongoing regarding this motion, which was presented by the Leader of the Opposition in April 2024.
- Three bleed kits had been installed in Heath Hayes, Wimblebury, and Hawks Green.
- Initial discussions with Burntwood First Responders suggested that bleed kits would be located with defibrillators already installed within the District, funded by a private company. This suggested that whoever took responsibility at each location for the defibrillators would also take on the maintenance of the bleed kit.
- The Council would also need to ensure that those locations and organisations were happy to maintain the bleed kits going forward. However, the Council was awaiting a formal response to confirm this.
- Once sufficiently updated, the outcome would be reported back accordingly to the full Council and the proposer of the motion.

Resolved:

That the update as provided by the Community Wellbeing Portfolio Leader be noted and accepted.

(ii) Supporting Our Armed Forces Community Motion

The Community Wellbeing Portfolio Leader acknowledged and paid tribute to the valiant heroes of D-Day, whose anniversary was commemorated last week, noting their courage and sacrifice continued to inspire us all.

The Community Wellbeing Portfolio Leader then advised the following in respect of the motion:

- Work was ongoing to implement this large motion. Initial discussions had taken place between the Portfolio Leader (proposer of the motion) and the leadership team regarding the financial and workforce implications of the motion. However, more information was required and therefore, the Portfolio Leader was arranging meetings with the West Midlands Reserve Forces and Cadets Association (WM RFCA) and would be attending the WM RFCA annual general meeting.
- The Portfolio Leader had also begun to have informal meetings with external stakeholders in the community to build relations going forward regarding the working group.
- The Portfolio Leader was proud that the 'D-Day' flag was flown last week at the Civic Centre and the 'Armed Forces Week' flag would be flown during Armed Forces Week (Monday 24 to Sunday 30 June).
- In conclusion, work was ongoing to improve how we supported our Armed Forces Community at the Council and further updates would be provided where relevant.

Resolved:

That the update as provided by the Community Wellbeing Portfolio Leader be noted and accepted.

8. Value for Money Progress Report 2023/24

Consideration was given to the report of the Head of Transformation and Assurance (Item 8.1 - 8.25).

Resolved:

That the progress at the end of the 2023-24 in the delivery of the Value for Money Improvement Plan set out at Appendix 1 of the report, be noted.

Reason for Decision:

The information allowed Cabinet to ensure that all appropriate steps were being taken to address the findings of the External Auditors and improve the Council's governance arrangements.

9. End of Year Performance Report 2023/24

Consideration was given to the report of the Head of Transformation & Assurance (Item 9.1 - 9.40).

Resolved:

That the progress at the end of the fourth quarter relating to the delivery of the Council's priorities as detailed at Appendices 1a-1d and the performance information set out at Appendix 2 of the report, be noted.

Reason for Decision:

The performance information allowed Cabinet to monitor progress in delivery of the Council's corporate priorities and operational services.

10. Strategic Risk Register

Consideration was given to the report of the Head of Transformation & Assurance (Item 10.1 - 10.12).

Resolved:

That the Strategic Risk Register and the progress made in the identification and management of the strategic risks, be approved.

Reason for Decision:

Cabinet was required to approve the Strategic Risk Register.

11. Appointment of Representatives to Serve on Outside Bodies

Consideration was given to the report of the Chief Executive (Item 11.1 - 11.5).

Resolved:

That:

(A) The appointment of Cabinet representatives to outside bodies for 2024-25, be approved (a copy of the agreed appointments was included as an Annex to these Minutes).

(B) The Chief Executive, in consultation with the Leader of the Council, be authorised to make appointments to additional outside bodies and amendments to any existing outside bodies, as necessary, throughout the municipal year, which would otherwise be determined by Cabinet.

Reasons for Decisions:

To reflect the wishes of the Cabinet as to which Members it wished to appoint to those outside bodies as listed in Appendix 1 of the report.

For practical purposes, Cabinet was also requested to delegate authority to the Chief Executive, in consultation with the Leader of the Council, to make appointments to any additional outside bodies, and amend existing appointments.

12. Housing Services Annual Complaints Performance and Service Improvement Report and Self-Assessment

Consideration was given to the report of the Head of Housing and Corporate Assets (Item 12.1 - 12.43).

Resolved:

That:

(A) The implications of the new Housing Ombudsman Complaint Handling Code, be noted.

(B) The Annual Complaints Performance and Service Improvement Report and the outcomes from the self-assessment form, further to its subsequent publication on the Council's website, be approved.

Reasons for Decisions:

To adhere to membership requirements of the Housing Ombudsman and its Complaint Handling Code 2024 for Landlords to produce an annual complaints performance and service improvement report for scrutiny and challenge by Cabinet, which must include the annual self-assessment against this Code to ensure complaint handling policy remained in line with the Ombudsman's requirements.

13. Decarbonisation of Housing Stock Properties

Consideration was given to the report of the Head of Housing and Corporate Assets (Item 13.1 - 13.5).

Resolved:

(A) That £818,097 of Cannock Chase District Council funding be allocated to match the West Midlands Combined Authority allocation of £818,097 to carry out and manage decarbonisation measures to dwellings managed by the Housing Revenue Account.

(B) A grant funding agreement be entered into with the West Midlands Combined Authority consortium for the purpose of delivery of the work and to accept the allocation of £818,097 funding from the Department for Energy Security and Net Zero.

(C) That the use of the West Midlands Combined Authority to carry out property assessments, co-ordination and design to provide a 'medium term plan' for each property in line with 'Publicly Available Specification 2035 British Standard' for retrofitting dwellings, be approved.

(D) The Head of Housing and Corporate Assets be granted delegated authority to finalise the project, Energy Efficiency Measures and complimentary works with the West Midlands Combined Authority and to deliver the project through to completion.

Reasons for Decisions:

The identified properties for this project required energy efficiency measures to be undertaken. Approval of this funding would allow the Council to stretch its budget by £818,097, doubling the number of units receiving work that could be funded through the Council's capital budget alone.

All properties identified for this project would require 'energy efficiency measures' to be undertaken to meet regulatory requirements. The current approved budget, report dated 1 February 2023, allowed for some capital spend on energy efficiency measures but not to the extent of the match required for the West Midlands Combined Authority (WMCA) funding allocation. There was however a contingency sum over the three-year budget period of £2.5m, which could be used for identified works arising from the Stock Condition Survey and for works to stock to meet regulatory requirements.

Approving some spend from the contingency sum would provide a match to the WMCA funding and enable more properties to immediately be improved with measures such as loft insulation top up and the installation of photovoltaic solar panels. Delivery of such measures will provide the following benefits:

- A reduction in carbon emissions from the stock.
- Improving energy efficiency will enhance the quality of life for residents, leading to healthier and more comfortable living environments.
- Improvement to living conditions, reducing fuel cost and fuel poverty for the most vulnerable and those facing financial difficulties.
- Investment in energy efficient technology measures.
- Economic benefits creating local job opportunities and improving the skills of the workforce.
- Detailed retrofit assessments would support in the development of the asset management plans, providing data on the energy efficiency to allow for planning of maintenance, repairs, replacements and upgrades to inform the 30-year business plan.
- Reduction in reliance on the national grid.

14. Increased Fixed Penalty Amounts for Environmental Offences

Consideration was given to the report of the Head of Regulatory Services (Item 14.1 - 14.6).

Resolved:

That:

(A) The proposed new fixed penalty amounts detailed at report Appendix 1, including the early payment provisions, and the penalty amounts set at the maximum levels introduced by the 2023 Regulations, be adopted.

(B) The increase in revenue from such penalties continued to be ring fenced and used to support environmental projects to prevent future offences.

(C) The Head of Regulatory Services be authorised to extend the current £250 cash reward (offered to residents whose reports of fly tipping lead to successful prosecutions or offenders' payments of fixed penalty notices) to all enviro-crime offences, with rewards proportionate to the maximum penalty for each.

Reasons for Decisions:

The aim was to create a greater deterrent to committing environmental offences within Cannock Chase District; to ensure the punishment was proportionate to the offence, and to demonstrate the Council's commitment to a zero-tolerance approach towards environmental crime.

Environmental crimes like littering and fly-tipping harm wildlife and nature, created eyesores and spoiled our citizens' and visitors' enjoyment of our public places and green spaces. It was hoped these new upper penalty limits would deter people from harming such spaces in the first instance and ensure that those who chose to offend faced tougher consequences. The proposals sought to strike a balance between deterring repeat offending and ensuring that penalties were proportionate and affordable. This approach recognised the costs associated with the Council having to pursue legal proceedings.

15. Staffordshire Leaders Board - Terms of Reference

Consideration was given to the report of the Chief Executive (Item 15.1 - 15.14).

Resolved:

That the updated Terms of Reference of the Leaders Board attached as Appendix 1 of the report, be noted.

Reasons for Decision:

The County, City and Staffordshire's eight District and Borough Councils have worked together over a number of years in many ways to benefit residents. This includes our collective response to the pandemic, supporting businesses and the economy, creating jobs and opportunities, delivering nationally important housing employment sites (examples include the Commonwealth Games, South Staffordshire College and Rugeley Power Station), working to reduce waste and increase recycling, tackling climate change, and by reimagining and reshaping the future of Cannock Town Centre.

The Leaders Board was created to build on this collaboration by recognising that a formal joint committee would be able to speak to central Government for the area and our communities. It also provides the foundation for exploring the potential of a deal with government, when the right time comes to do so, for the devolution of powers and funding to the area.

Although Stoke on Trent were not one of the original members of the Leaders Board it was always hoped that they could be brought on board at some point, and agreement has now been reached to enable this to happen. This will however, require a number of amendments to be made to the Terms of Reference of the Board, and these amendments need to be considered and agreed by all parties, hence this report.

16. Cannock Town Centre - Levelling Up Fund

Consideration was given to the report of the Head of Economic Development and Planning (Item 16.1 - 16.20).

Resolved:

That:

(A) Progress made on delivery of the project, be noted.

(B) The project scope for the second phase of town centre regeneration as set out in report paragraph 5.7 and the confidential appendix 2 be agreed.

(C) Subject to approval of the Project Adjustment Request (including a request for an extension of time) from the Department for Levelling Up, Housing and Communities, permission to spend up to £8,750,000 from the capital programme allocation in respect of those works identified in report paragraph 5.23, be approved.

(D) A surrender of head leasehold interests and acquisition of a freehold interest in commercial properties in Cannock town centre, as set out in the confidential appendix 2 of the report be accepted, to facilitate the delivery of phase 2 of the town centre regeneration scheme, subject to the Department for Levelling Up, Housing and Communities approving the Project Adjustment Request (including a request for extension of time) and VAT advice.

(E) The withdrawal of the Compulsory Purchase Order for Cannock Town Centre, be endorsed and noted.

(F) Authority be delegated to the Head of Economic Development and Planning in consultation with the Deputy Chief Executive-Place, Deputy Chief Executive-Resources, Head of Law & Governance and the Portfolio Leader for Regeneration & High Streets to finalise all matters related to the surrender of the head leaseholds and vacant possession process, subject to approval from the Department for Levelling Up, Housing and Communities of the Project Adjustment Request which included a request for an extension of time.

(G) Authority be delegated to the Head of Economic Development and Planning in consultation with the Deputy Chief Executive-Place, Deputy Chief Executive-Resources, Head of Law & Governance, the Portfolio Leader for Regeneration & High Streets and the Levelling Up Fund Programme Board to take all steps to implement phase 2 of the programme within the agreed scope and budget.

(H) It be noted that as a result of decision (G), above, there would be no available capacity or capital to deliver other projects across the District.

(I) Based on the information contained in report paragraph 5.13 and as a result of decision (C), above, approval be given to proceeding with a competitive developer procurement process for the appointment of a preferred developer to deliver re-development opportunities for Cannock town centre, the detail of which would be subject to a future report to Cabinet.

Reasons for Decisions:

A significant amount of work had been completed to inform the detail of the second phase of Cannock town centre Levelling Up Fund project. Detailed costings and design work had illustrated which elements of the original scheme were deliverable within the Levelling Up Fund funding timescales.

Colleagues from the Department for Levelling Up, Housing and Communities had confirmed that planning and subsequent implementation of phase 2 of the Cannock Town Centre Regeneration programme should be progressed at pace.

The commercial transactions referred to in report paragraph 2.4 would enable the Council to secure vacant possession ahead of proposed demolition works. Due to the Council negotiating agreements with the relevant landowners, the Council no longer needed to pursue a Compulsory Purchase Order (CPO) through to public inquiry.

The meeting closed at 7:02 p.m.

Leader

Annex

Cannock Chase Council

Cabinet Appointed Representatives to Outside Bodies for 2024-25

Notes:

- All the below listed positions are appointed on an annual basis at the first Cabinet meeting after Annual Council.
- All bodies have one seat available unless otherwise stated.

Name of Body	Appointed Representatives
Cannock Chase National Landscape Joint Management Committee	Parks, Culture, and Heritage Portfolio Leader **Substitute:** Cllr. M. Freeman
Local Government Association General Assembly	Leader of the Council **Substitute:** Community Wellbeing Portfolio Leader
Local Strategic Partnership (Chase Community Partnership) **5 seats to be filled**	• Leader of the Council • Community Wellbeing Portfolio Leader • Housing and Corporate Assets Portfolio Leader • Parks, Culture & Heritage Portfolio Leader • Leader of the Opposition
Norton Canes Community Partnership	Community Wellbeing Portfolio Leader
PATROL (Parking and Traffic Regulations Outside London) Joint Committee	Environment & Climate Change Portfolio Leader
Poplars Landfill Site Liaison Committee	Environment & Climate Change Portfolio Leader
Staffordshire Destination Management Partnership	Regeneration and High Streets Portfolio Leader (or Head of Economic Development & Planning as nominee)
Staffordshire Police, Fire, and Crime Panel	Community Wellbeing Portfolio Leader **Substitute:** Leader of the Council
Staffordshire Sustainability Board (Formerly the Staffordshire and Stoke-on-Trent Joint Waste Management Board)	Environment & Climate Change Portfolio Leader **Substitute:** Cllr. M. Dunnett
Staffordshire Playing Fields Association	Parks, Culture & Heritage Portfolio Leader
West Midlands Employers	Leader of the Council

Item No. 5.1

Forward Plan of Decisions to be taken by the Cabinet: July to September 2024

For Cannock Chase Council, a key decision is as an Executive decision that is likely to:

- Result in the Council incurring expenditure or making savings at or above a threshold of 0.5% of the gross turnover of the Council.
- Affect communities living or working in two or more Council Wards.

Representations in respect of any of matters detailed below should be sent in writing to the contact officer indicated alongside each item via email to membersservices@cannockchasedc.gov.uk

Copies of non-confidential items will be published on the Council's website 5 clear working days prior to the relevant meeting date.

Item	Contact Officer / Cabinet Member	Date of Cabinet	Key Decision	Confidential Item	Reasons for Confidentiality	Representations Received
July 2024						
Permission to Spend - Swimming Pool Support Fund	Head of Wellbeing / Community Wellbeing Portfolio Leader	18/07/24	No	No		N/A
Local Electric Vehicle Infrastructure Fund	Head of Regulatory Services / Environment & Climate Change Portfolio Leader	18/07/24	No	No		N/A
Proposed Charging Scheme for Monitoring of Legal Agreements for Biodiversity Net Gain Sites	Head of Economic Development & Planning / Head of Operations / Regeneration and High Streets Portfolio Leader	18/07/24	No	No		N/A
August 2024						
Aelfgar Development Scheme	Deputy Chief Executive-Resources / Head of Housing & Corporate Assets / Housing and Corporate Assets Portfolio Leader	15/08/24	No	No		N/A
Weekly Food Waste Collections & Inclusion in Capital Programme and Permission to Spend	Head of Operations / Environment & Climate Change Portfolio Leader	15/08/24	No	No		N/A

Item	Contact Officer / Cabinet Member	Date of Cabinet	Key Decision	Confidential Item	Reasons for Confidentiality	Representations Received
HRA Compensation Policy	Head of Housing and Corporate Assets / Housing and Corporate Assets Portfolio Leader	15/08/24	No	No		N/A
Great Crested Newt District Level Licensing Scheme	Head of Economic Development and Planning / Regeneration and High Streets Portfolio Leader	15/08/24	No	No		N/A
Renewal of Public Spaces Protection Order (Alcohol Restrictions) and Introduction of Additional Prohibited Activities	Head of Wellbeing / Community Wellbeing Portfolio Leader	15/08/24	Yes	No		N/A
Housing Assistance Policy	Head of Wellbeing / Community Wellbeing Portfolio Leader	15/08/24	Yes	No		N/A
Flaxley Park Play Area	Head of Operations / Parks, Culture, and Heritage Portfolio Leader	15/08/24	No	No		N/A
September 2024						
Cannock Chase Local Plan 2018-2040: Regulation 22 Submission	Head of Economic Development & Planning / Regeneration and High Streets Portfolio Leader	26/09/24	No	No		N/A
Permission to Spend - CCTV Circuits	Head of Wellbeing / Community Wellbeing Portfolio Leader	26/09/24	No	No		N/A
Housing Services - Resident Involvement Strategy	Head of Housing & Corporate Assets / Housing and Corporate Assets Portfolio Leader	26/09/24	No	No		N/A

Item No. 5.3

Item	Contact Officer / Cabinet Member	Date of Cabinet	Key Decision	Confidential Item	Reasons for Confidentiality	Representations Received
Vehicle Replacement	Head of Operations / Environment & Climate Change Portfolio Leader	26/09/24	Yes	No		N/A
Parks Rationalisation	Head of Operations / Parks, Culture, and Heritage Portfolio Leader	26/09/24	Yes	No		N/A

Charging Schedule for Monitoring of Legal Agreements for Biodiversity Net Gain Sites

Committee: Cabinet

Date of Meeting: 18 July 2024

Report of: Head of Economic Development and Planning / Head of Operations

Portfolio: Regeneration and High Streets / Environment and Climate Change

---

1 Purpose of Report

1.1 To seek approval for the charging schedule for monitoring of legal agreements for Biodiversity Net Gain sites.

2 Recommendations

2.1 That the charging schedule for monitoring of legal agreements for Biodiversity Net Gain sites as set out in Appendix 1 is approved.

2.2 That it is agreed to delegate the date of implementation of the charging schedule to be agreed by the Head of Economic Development and Planning and the Head of Operations in consultation with the Cabinet Portfolio Holder.

Reasons for Recommendations

2.3 The introduction of a charging schedule for the monitoring of BNG sites will provide a means to recoup the cost of council officers' time monitoring legal agreements which secure the delivery of significant on-site habitat enhancement or registered off-site biodiversity gains within Cannock Chase district.

2.4 There are no charging models provided by the Planning Advisory Service or Central Government so Local Authorities have discretion to set their own fee levels.

2.5 The charging schedule presented at Appendix 1 splits sites into different bands dependant on their size and difficulty of habitat enhancement/creation so at to be proportionate and fair. This complies with Government guidance in that charges should reflect the actual cost of monitoring.

3 Key Issues

3.1 Mandatory Biodiversity Net Gain (BNG) commenced in February 2024 for all Town and Country Planning Act development (subject to certain exemptions).

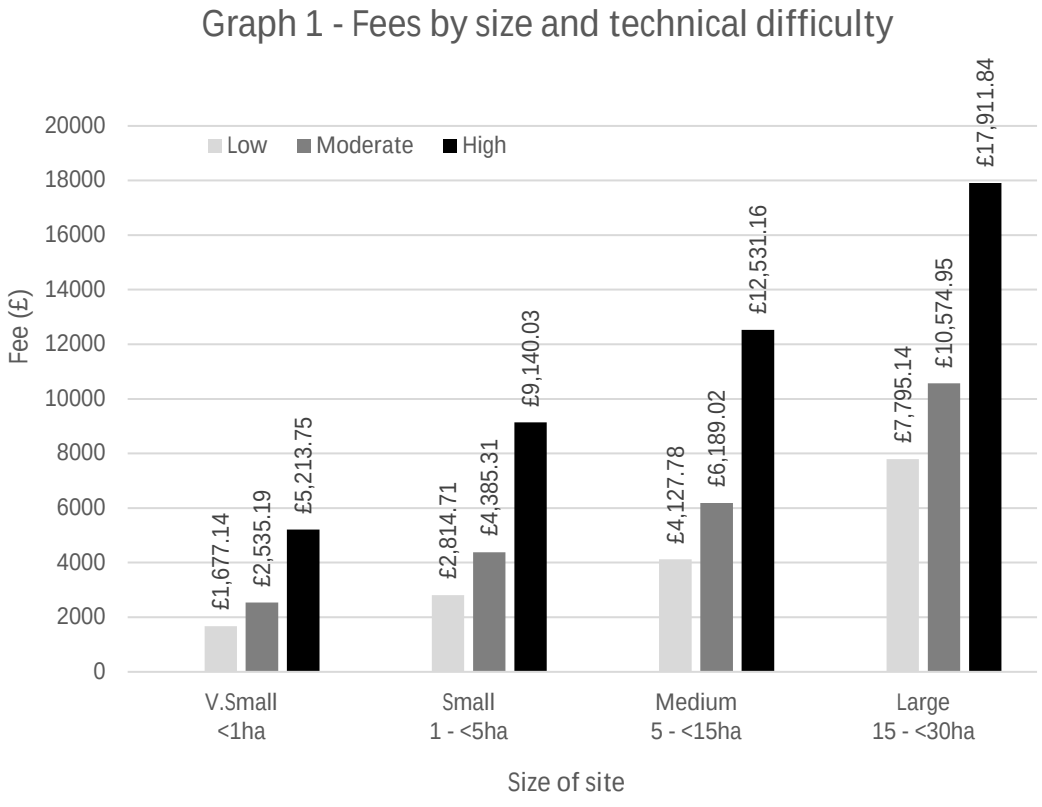
3.2 Developments must demonstrate at least a 10% net gain in biodiversity through creation or enhancement of habitats on development sites or elsewhere (off-site BNG).

3.3 This new mandatory requirement will require Cannock Chase Council to enter into legal agreements to secure significant on-site habitat enhancements or to secure registered off-site biodiversity gains for a minimum of 30 years where these are situated in the district.

3.4 The monitoring on delivery of such legal agreements over the minimum 30-year period is resource intensive and will involve council officers' time including the council ecologist and S106 officer. This resource requirement will also grow year on year as more legal agreements are signed annually.

3.5 Regulation 122 (2A) of the Community Infrastructure Levy (CIL) Regulations 2010 (as amended) permits local authorities to charge a fee for monitoring and reporting on planning obligations, and it is therefore considered appropriate for the council to levy a charge on legal agreements securing BNG so that it is cost neutral to the council.

3.6 The charging schedule yields a one-off fee to recover the costs of monitoring over the 30 years of each agreement. The charging schedule (Appendix 1) splits sites into different bands dependant on their size and difficulty of habitat enhancement/creation so at to be proportionate and fair and is illustrated below in Graph 1.



4 Relationship to Corporate Priorities

4.1 This report supports the Council's Corporate Priorities as follows:

(i) Priority 1 - Economic Prosperity - quality development management outcomes will be secured.

(ii) Priority 2 - Health and Wellbeing - enhanced biodiversity provides health and well-being benefits.

(iii) Priority 3 - The Community -enhanced biodiversity in the district will provide attractive places where people want to live.

(iv) Priority 4 - Responsible Council - adoption of the charging schedule ensures that the council is recovering the costs of monitoring legal agreements with regards to BNG.

5 Report Detail

5.1 Biodiversity Net Gain (BNG) is a new mandatory requirement for all Town and Country Planning Act development (subject to certain exemptions) to deliver a minimum 10% gain for biodiversity.

5.2 BNG must be achieved through enhancement and/or creation of habitats on the development site itself, or where a deficit remains, on sites elsewhere (known as off-site BNG). The habitat value is quantified in biodiversity units using a statutory metric. All habitats created or enhanced off-site must be secured by a legal agreement for a minimum of 30 years. Any significant BNG habitat on-site must also be likewise secured.

5.3 Significant on-site enhancements include the following within the redline boundary of a planning application:

- habitat creation/enhancement where the distinctiveness of that habitat is increased, particularly habitats with a baseline of medium or high distinctiveness
- any habitats of low distinctiveness which form a significant proportion of the on-site biodiversity value (relative to the pre-development biodiversity value)
- any habitats of low distinctiveness which are deemed to contribute significantly to an ecological network, including habitats that form part of green infrastructure (as defined by the emerging local plan policy S07.8: Protecting, conserving and enhancing green infrastructure, and the Strategic Green Space Network mapping)
- any low distinctiveness habitats which are considered to be functionally linked to designated biodiversity sites (SAC, SSSI, SBI etc) or irreplaceable habitats.

5.4 Non-significant on-site enhancements are habitat enhancements whose loss will not significantly decrease the development's biodiversity value. For example, this may include new private gardens and low distinctiveness urban habitats which do not fall within the categories above for significant BNG, for example intensive green roofs, container planting, green walls and ornamental ponds.

5.5 Planning obligations are legal agreements entered into to mitigate the impacts of a proposed development. Planning obligations are normally secured through a legal agreement under Section 106 of the Town & Country Planning Act 1990 (as amended) and are a mechanism through which development proposals can be made acceptable in planning terms. The planning obligation is between the landowner (or someone who has legal control over the land) and the Local Planning Authority.

5.6 Any planning obligation for BNG must encompass the initial habitat creation works, the ongoing habitat management regime over a minimum of 30 years, and the site monitoring surveys and reporting to the body with whom the legal agreement is signed.

5.7 Monitoring of the progress towards achieving the biodiversity net gain both on and off-site will take both time and expertise which would be provided by the council's ecologist and s106 monitoring officer.

5.8 The ecologist will scrutinise biodiversity net gain auditing reports submitted to the council as well as carry out site visits at certain milestone years to check progress with habitat enhancement/creation. The section 106 monitoring officer will provide administrative support to ensure monitoring information is submitted to the council for consideration in a timely manner and recorded appropriately.

5.9 Monitoring details will be used to inform the council's own planning monitoring reports as well as feeding back to government where necessary.

5.10 The Council has the power to set fee charges under Section 93 of the Local Government Act 2003 for discretionary services and regulation 122 (2A) of the Community Infrastructure Levy (CIL) Regulations 2010 (as amended) permits local authorities to charge a fee for monitoring and reporting on planning obligations and it is in this context it is considered appropriate to recover the cost of administration and monitoring section 106 obligations.

5.11 The proposed charging schedule attached as Appendix 1 accords with the principle of making it cost neutral to the authority and is in accordance with the Council's Financial Rules and Procedures.

5.12 The charging structure is based on estimated officer time at each monitoring event, related to both size (total habitat area to be monitored, in hectares) and complexity of the site (based on the highest technical difficulty category of the habitats included, using the Difficulty of Enhancement / Creation scores in the Statutory Metric). Also included is an allowance for corporate overheads and inflation. Finance were consulted on appropriate figures to use for corporate overheads and salaries.

5.13 The council's Financial Rules and Procedures on Fees & Charges and Income Collection specify that fees be reviewed annually (for example to adjust for relevant inflation figure and staff pay awards). After eighteen months to three years, when the first tranche of site monitoring reports have been processed, actual costs will be better understood, and the charges can be reviewed in light of this. At this stage the charging structure may be revised to better reflect real costs.

5.14 A number of options were considered in setting the charging schedule and the approaches other Local Planning Authorities have taken to setting these fees were scrutinised. See Appendix 2 for other Local Planning Authority approaches for benchmarking purposes. The methods other Local Planning Authorities used was varied so these were all considered including charging:

(i) a rate per biodiversity unit.

(ii) rates for different ranges of biodiversity units.

(iii) a flat fee for all developments (capped at a maximum number of houses).

(iv) rates per hectare.

(v) rates for different ranges of site sizes.

(vi) rates for different ranges of habitat enhancement complexity, and

(vii) a combination of site size and habitat enhancement complexity.

5.15 Nearly all other Local Planning Authorities charge a one-off fee payable at the signing of the legal agreement to cover the costs over the 30 years, and most include an index-linked element to account for inflation. They also have charges tiered by size of the BNG site or how many biodiversity units they are providing and some also couple this with the technical difficulty of creating the habitats. The assumption is that larger and more complex sites will take more staff time to monitor.

5.16 Of the benchmarked councils the lower end examples start their scale of charges at around £2,000 - £5,000. The upper end ranges are more variable, and some have bespoke costs for large complex sites. Leeds City Council have a simple two-tier scale, charging £2,500 or £5,000, with the threshold for the higher fee being sites yielding more than 10 Biodiversity Units.

5.17 Buckinghamshire developed the most comprehensive staff-time calculator spreadsheet though their fees have not been published, however, North Yorkshire Council are utilising a similar spreadsheet and the smallest (<5ha), and simplest sites are charged £2,522 through to the largest and most complex sites of greater than 20 hectares (ha) charged at £9,289.

5.18 One benchmarked Council, Bracknell Forest, charges pro-rata by hectares, e.g. a 25-ha site (large in BNG terms) would be £90,000 for the 30-year monitoring costs.

5.19 The proposed Cannock Chase Council charging schedule (Appendix 1) uses a combination of v) and vi) as it is considered the most accurate in terms of resource estimation whilst not being so detailed as to become overburdensome to calculate and understand and not too simplistic as to be unfair or disproportionate across the range of developments likely to be in scope. This method is used by at least two other LPAs; North Yorkshire Council and Buckinghamshire Council.

5.20 Of particular note is that the Cannock Chase Council charging schedule includes four tiers of site sizes, including very small sites (<1ha) to cater for the large number of planning applications that the council receives of this size and so they are not disproportionality charged.

5.21 As well as ecology officer time, the proposed Cannock Chase Council charging schedule also includes an allowance for administrative support and staff mileage to undertake site visits.

5.22 Using this approach, the proposed fees range from £1,677.14 to £17,911.84. The lowest fee is for the smallest sites of less than 1 ha, and which only include habitats that have a low technical difficulty to enhance/create. The highest fee is for sites of 15 to <30ha and which include habitats that have a high technical difficulty to enhance/create. Over the 30-year period for which these legal agreements will extend, that equates to £55.90 to £597.06 per annum. For sites larger than 30ha a bespoke fee would be agreed.

5.23 On average (based on the previous 3 years), Cannock Chase District Council receives 12 major applications and 107 minor planning applications per year.

5.24 It is likely that all major applications will include significant on-site habitat enhancement. For minor applications it is not easy to estimate how many will include significant on-site habitat enhancement. The situation with regards to off-site habitat enhancement or creation in the district is also very unclear at the moment.

5.25 Based on the charging schedule set out in this report at Appendix 1 and assuming an average BNG agreement of a medium sized site at medium technical difficulty of habitat creation for all major applications, the following annual income would be generated:

12 x £6,189.02 (medium size site @ medium quality habitat) = £74,268,24 per annum.

5.26 Based on the assumptions at 5.19, year 2 report review and site visits will take 25 days of officer time. By year 10 interval this will increase to 76 days and will continue to climb beyond year 10. This would equate to 15 weeks full time work and is therefore not achievable under current staffing resources.

5.27 Monitoring fees will be secured by way of contractual covenant in the Section 106 agreement itself and will be in addition to the legal charge for drafting and checking the obligation. Fees will be payable at the same time as any legal costs or on the execution of the legal agreement.

6 Implications

6.1 Financial

It is anticipated that the imposition of charging for monitoring of BNG legal agreements will bring in an additional income stream in the region of £74,000 per annum.

Costs proposed would not exceed the cost of providing the service as stipulated in guidance. The BNG legal agreement monitoring charging schedule will be reviewed and amended where needed as informed by monitoring of the service.

Not imposing monitoring fees would be detrimental to the council's finances. Costs will rise significantly over 30 years and the total caseload of agreements to be monitored will increase.

An over-simplified charging structure could result in the council failing to recover its costs in full or significantly over-charging.

6.2 Legal

Regulation 122 (2A) of the Community Infrastructure Levy (CIL) Regulations 2010 (as amended) permits local authorities to charge a fee for monitoring and reporting on planning obligations, and it is therefore considered appropriate for the council to levy a charge on legal agreements securing BNG so that it is cost neutral to the council.

At present any such fees would have to be determined and negotiated ad hoc with each developer which would add legal officer time to do so. The proposed monitoring fee schedule simply provides a standardised way to derive that fee in a way that accounts for true costs over 30 years and in doing so reduces the burden on legal time.

6.3 Human Resources

There are no staffing implications at the current time however, in order to resource the monitoring of legal agreements for biodiversity net gain sites there must be sufficient technical expertise in ecology in the council. The council's Countryside Ecology Officer currently fulfils this role. The S106 officer in the Development Management Team will also be involved in administrating the monitoring of BNG legal agreements.

As the number of monitoring agreements is anticipated to grow year on year, the staffing levels to service this will need to be kept under review.

6.4 Risk Management

None

6.5 Equality & Diversity

None

6.6 Climate Change

None

7 Appendices

Appendix 1: Cannock Chase Council Fee Charging Schedule for Monitoring of Legal Agreements for Biodiversity Net Gain Sites

Appendix 2: Benchmarking of BNG Monitoring and Reporting Fees: Case study examples for monitoring fees in other local planning authorities

8 Previous Consideration

None

9 Background Papers

None

Contact Officer: Suzanne Wykes

Telephone Number: 01543 462 621

Report Track: Cabinet: 18/07/24

Key Decision: No

Item No. 6.8

Appendix 1

Cannock Chase Council Fee Charging Schedule for Monitoring of Legal Agreements for Biodiversity Net Gain Sites in the District

	Technical difficulty of habitat enhancement/creation		
Size	**Low**	**Moderate**	**High**
Very Small (<1ha)	£1,677.14	£2,535.19	£5,213.75
Small (1 to <5 ha)	£2,814.71	£4,385.31	£9,140.03
Medium (5 to <15ha)	£4,127.78	£6,189.02	£12,531.16
Large (15 to <30ha)	£7,795.14	£10,574.95	£17,911.84

Fees are one off and payable at the same time as any legal costs or on the execution of the legal agreement.

Fees are not subject to VAT.

Benchmarking of BNG Monitoring and Reporting Fees: Case study examples for monitoring fees in other local planning authorities

Leeds City Council

- Charge a one off-fee for 'Biodiversity Monitoring & Reporting Body' function.
- Two-tier fee, scaled by number of Biodiversity Units (BUs) involved in the agreement.
- £2.5k for up to 10 biodiversity units or £5k for over 10 biodiversity units (where units purchased directly from a private Habitat Bank or on developers' own land*).

COMMENTS:

- No indication of allowance for price inflation over 30 years.
- Simple, easy to understand.
- This applies only to non-council land.
- Very small sites have a relatively high cost, and very large sites have a relatively low cost.
- They suggest cost is in line with similar monitoring obligations of other S106 items such as Highways.

Buckinghamshire County Council

- Charging a one-off fee for Biodiversity Monitoring.
- Developed a Monitoring Fees Calculator – an excel spreadsheet based on estimated staff time.
- Uses an assumed inflation rate of 3.5% per annum.
- Fees Calculator based on several input variables and pre-determined values.
- Size of BNG offset site (small 0-10ha, medium 11-20ha, large >20ha).
- Technical Difficulty of BNG habitats involved (Low, Moderate, High - use highest present on site).
- Number of monitoring events = 10, plus initial review of plan year zero - Some years reviewing report only, some years report plus site visit (4, 5 or 7 occasions depending technical difficulty).
- Estimated time per report or site visit (range: small sites of low diff to large sites of high difficulty).

COMMENTS

- Rather involved; initially complicated to understand but generates the figures automatically.
- Very small sites have a relatively high cost.
- The calculator would be consulted for each new agreement.
- Useful approach and the calculator could be adapted or simplified.
- Fixed inflation projection could draw criticism.
- Could also be used for levying a fee at time of each monitoring event rather than a one-off up-front payment, index linked for actual inflation using CPI or RPI.

North Yorkshire Council

- Have largely utilised the Buckinghamshire approach.
- Eight monitoring intervals: Years 1,3,5,10,15,20,25 and 30.

COMMENTS

- No allowance for administration time.

Bracknell Forest Council

- Charging a one off-fee for 'administration monitoring' of106 agreements for BNG.
- Scaled by area; up to one hectare £3,600.
- Over one hectare £3,660/ha pro rata.

COMMENTS

- Based on estimate of hours 60hrs/ 60+hrs spent in admin and monitoring.
- No mention of indexation so does not factor costs increasing over 30 years.
- Pro rata the most expensive e.g., a 25ha site x £3600 = £90,000.

Calderdale Council (per guidance published Dec 2022)

- One-off charges payable 'to cover facilitation, monitoring and strategic biodiversity delivery':
- £2000 per BU 'to cover the cost of monitoring over 30-year period'.
- £1000 per BU 'strategic biodiversity delivery charge'.
- £2000 per BU one-off 'facilitation charge' for Council owned land-banks.

COMMENTS

- The above were arrived at based on a proposal to sell BUs on council land priced at £20k per BU.
- The monitoring cost and the facilitation charge each being 10% of 20k, the strategic charge being 5% of 20k.
- For Habitat Banks, only the strategic charge would be levied, £1,000.
- Monitoring fee plus Strategic charge applies to other cases.
- Facilitation charge applies to council land banks for baseline surveys, management plans etc.
- Would query whether the strategic fee can be justified for BNG.

Wyre Forest

- £750 per BU to cover the cost of monitoring over 30-year period.
- Five monitoring intervals: 2,5,10,15,20.

COMMENTS

- Based on estimate of 24.5hrs spent in admin and monitoring.
- No mention of indexation so does not factor costs increasing over 30 years.
- Includes a fee for £150 for enforcement, whether required or not.

South Cambridgeshire District Council

- 'District Council Ecologist Monitoring Fee' payable at each monitoring event.
- 'To cover the cost of monitoring the Habitat Site and reviewing the Management Plan and the Monitoring Report'.
- Paid in ten instalments years 1, 2, 3, 4, 5, 10, 15, 20, 25, 30.
- Index Linked by way of CPI.

COMMENTS

- Appears to be the only one of these case studies levying a fee at each monitoring event.
- Burdensome administration as having to levy and collect fees at intervals throughout the 30 year period.

South Oxfordshire District Council/Vale of White Horse District Council

- Charging a one off fee for the 30 years.
- Fee based on size of habitat bank- 0-50ha, 50-100ha and >100ha.
- Based on RPI of 3.3%, assumed until next review.
- Based on eight monitoring points at years 1,2,5,10,15,20,25 and 30.
- Used hourly rate of ecology officer.

COMMENTS

- Fees designed for large habitat banks, not smaller sites.
- Appears to be no allowance for administration time.

New Forest Council

- Charging a one-off fee for Biodiversity Monitoring.
- Based on five monitoring points at years 2, 5, 10, 20 and 30.
- Flat fee of £4625, 'developments up to 50 units' (but units here meaning dwellings).
- Developments over 50 units 'Minimum £4,625. Additional rate charged if physical inspection likely to take additional time ''Subject to annual indexation uplift using the Retail Prices Index" (RPI).

COMMENTS

- RPI indexation applied to agreements is revised annually, but as it is still a one-off fee charged up- front this does not factor the ongoing cost (of officer time etc.) increasing over the 30 years.
- On the other hand, a very straightforward approach to inflation and there will be an income stream from new agreements which rises year on year with RPI.
- Very small sites have a relatively high cost.

Permission to Spend Swimming Pool Support Fund

Committee: Cabinet

Date of Meeting: 18 July 2024

Report of: Head of Wellbeing

Portfolio: Community Wellbeing

1 Purpose of Report

1.1 To request approval to spend £238,275 installing Photo Voltaic Panels at Rugeley Leisure Centre.

2 Recommendations

2.1 That Cabinet recommends that Council include £238,275 in its capital programme for the installation of Photo Voltaic Panels at Rugeley Leisure Centre and, subject to Council approval, grants permission to spend.

Reasons for Recommendations

2.2 Funding has been awarded to Cannock Chase District Council for energy efficiency measures at Rugeley Leisure Centre. To proceed with the interventions, permission to spend is required.

3 Key Issues

3.1 Funding has been awarded to Rugeley Leisure Centre from the Swimming Pool Support Fund to install solar PV to reduce energy consumption and therefore running costs of the facility. In turn this will reduce carbon emissions.

3.2 Permission to spend the funding is required, to enable this project to be delivered.

4 Relationship to Corporate Priorities

4.1 Installing measures to improve the energy efficiency of Rugeley Leisure Centre directly supports corporate priority 2, Health and Wellbeing, 3, The Community and 4 Responsible Council.

5 Report Detail

5.1 The Swimming Pool Support Fund is a £80million government funding programme administered by Sport England to ensure the viability of swimming pools across the country. Phase 2 was for capital interventions to improve the energy efficiency of public facilities over the medium to long term.

5.2 Requests for funding were more than the funding available, however Cannock Chase District Council have been successful in receiving a total of £238,275 for Photo Voltaic Panels at Rugeley Leisure Centre.

5.3 Funding has to be spent by the end of March 2025 and this report is asking for permission to spend the grant allocation. In accepting this grant funding, the local authority agrees to continue to operate the swimming pool for a period of 10 years.

5.4 Staffordshire County Council own the Leisure Centre and Cannock Chase District Council lease the centre from them. Permission will need to be granted from the County Council to proceed with the installation.

6 Implications

6.1 Financial

The Council was awarded a capital grant from Sport England in respect of the swimming pool support fund. This amounted to £238,275 for the installation of Photo Voltaic (PV) panels. The Council has had to enter into a grant agreement with Sport England and has reporting requirements to comply with.

As set out in paragraph 5.3 funding needs to be spent by 31 March 2025 and the Council is required to operate the swimming pool for a period of 10 years.

6.2 Legal

Procurement of goods, services or works will need to comply with the requirements set out in the Council's Procurement Regulations.

6.3 Human Resources

None.

6.4 Risk Management

None.

6.5 Equalities and Diversity

Rugeley Leisure Centre ensures it's provision, including swimming is fully accessible and open to everyone.

6.6 Health

Provision of swimming pools has a positive impact on health and wellbeing, this funding is designed to secure that provision. As well as swimming for the public, Rugeley Leisure Centre has extensive provision for school swimming.

6.7 Climate Change

These interventions will improve energy efficiency and reduce carbon emissions.

7 Appendices

None

8 Previous Consideration

None

9 Background Papers

None

Contact Officer:	Anna Nevin
Telephone Number:	01785 619 176
Report Track:	Cabinet: 18/07/24
Key Decision:	No

Local Electric Vehicle Infrastructure Fund

Committee: Cabinet

Date of Meeting: 18 July 2024

Report of: Head of Regulatory Services

Portfolio: Environment and Climate Change

1 Purpose of Report

1.1 To raise awareness and seek approval for Cannock Chase District Council's (CCDC) ongoing involvement in the Local Electric Vehicle Infrastructure (LEVI) Programme, working in partnership with Staffordshire County Council and other neighbouring District and Borough Councils.

2 Recommendations

2.1 That Cabinet agrees to continue the collaborative partnership with Staffordshire County Council and others to facilitate and coordinate the delivery of Electric Vehicle infrastructure in District and Borough locations with LEVI funding.

2.2 That Cabinet notes any formal consideration or use of the LEVI programme (including funding draw-down), will be subject to business case and further report(s) will be required to come to Cabinet for decision and formal approval requirements. At this stage, the Council is not under any contractual commitment.

2.3 That Cabinet notes the draft list of potential sites that may be considered in future for the LEVI programme (See Appendix 1).

2.4 To note and acknowledge the timescale and key dates around the next stages of the LEVI programme and for CCDC to participate across these next stages including the draft list of potential sites for consideration (See Appendix 2)

Reasons for Recommendations

2.5 The opportunity to access this funding enables the ongoing improvement to the Electric Vehicle Infrastructure in the District and helps to support the sustainability aspirations to move to Carbon Net Zero by 2040.

3 Key Issues

3.1 The Council is working alongside key partners to support the delivery of the LEVI Programme across Staffordshire. The timeline of significant dates can be seen in Appendix 2.

3.2 The Council has two options:

1 Continue to participate in the Programme and recognise the potential benefits to residents and those visiting and working in the District.

2 Not to be part of this Programme. This will not assist the Council in achieving its priorities or support residents in movements towards the use of less

polluting modes of transport, that support improvement in air quality and reduction in noise pollution.

3.3 To continue involvement in the Programme, allows the Council access to future funding across the life cycle of the project Tranche One will bring over £4 million worth of funding across the County. Should it wish to opt out later the Council can do so; this will not affect delivery of the wider project.

4 Relationship to Corporate Priorities

4.1 This Project Supports Corporate Objective 2 and 3- Health & Wellbeing and The Community.

4.2 Through facilitating the switch from petrol and diesel vehicles to carbon zero fuelled vehicles, such as EVs, the Council will not only contribute to the reduction in nitrogen oxide emissions across the county but also contribute towards the reduction in the amount of harmful air pollutants such as volatile organic compounds and sulphur dioxide.

4.3 Throughout Staffordshire, transport contributes 35% of the 6.5 million tonnes of annual carbon emissions. EV adoption forms a critical part in tackling climate change, and the decarbonisation of transport across Staffordshire and the Borough is recognised as an important factor in this. Reducing emissions by supporting infrastructure for zero emissions vehicles like charge points is one of several actions that will contribute to an improvement in emissions.

5 Report Detail

5.1 The National Strategy (Taking Charge: The Electric Vehicle Infrastructure Strategy) published in March 2022 acknowledges that not everyone has access to off-street parking enabling them to charge an electric vehicle. In recognising this, the strategy document emphasises that the government will focus efforts on installing more charge points, providing convenient and affordable charging, ideally on the street where residents live. Within the document, the government sets out its role which is to set the right foundations for an equitable nationwide charging roll-out, removing barriers along the way (Taking Charge, 2022).

5.2 In January 2023, Staffordshire County Council's (SCC) Cabinet approved the SCC Public Electric Vehicle Charging Infrastructure Strategy (See Appendix 3). It was acknowledged within the Strategy that Staffordshire County Council can enable and facilitate the development of a charging infrastructure network across the county. This position aligns with recent Department for Transport communication which outlined that *"As the market develops, we expect private investors to fund a growing proportion of the cost of charge point roll out. But there will continue to be a central role for local authorities, ensuring charge point rollout meets local needs (DfT, 2024)."*

5.3 The strategy assists in enabling electric vehicles (EV) to be a viable option for residents, visitors and businesses whilst helping to support the aims of SCC's Strategic Plan and the vision of the Staffordshire Sustainability Board, which aligns with the District's own aspirations through contributing towards achieving carbon net zero and improving the quality of life for residents through a reduction of noise and air quality impacts.

5.4 As of 31 January 2024, there are 428 public charge points in Staffordshire with 54% (233) of the charge points being rapid chargers (>=50kWh). CENEX who are a LEVI support body estimates that Staffordshire will require 5,140 electric vehicle charge point sockets by 2030.

The SCC Strategy identifies that collaborating with District and Borough Councils to install EV infrastructure at areas of off-street parking where residential needs are considered, should be a focal point.

6 Implications

6.1 Financial

None at this stage, there is no formal contractual commitment to LEVI.

6.2 Legal

None at this stage - there may be a future need to assess land ownership if CCDC is not landowner for the planned sites. All legal due diligence to be undertaken as part of any future consideration, business case and further reports to Cabinet as part of the formal decision making and governance approval process.

6.3 Human Resources

Resource will be required, but only minimal at this stage.

6.4 Risk Management

None at this stage. All risk will be considered as part of any future business case and Cabinet reports, as part of the formal decision making and governance approval process.

6.5 Equalities and Diversity

None.

6.6 Health

This is a positive step for the health of those in the District.

6.7 Climate Change

This funding opportunity securing additional EV charging points will facilitate electric vehicle use, helping to support the Council's facilitation of more sustainable travel methods of transport across the District.

Through facilitating the switch from petrol and diesel vehicles to carbon zero fuelled vehicles such as EVs, the Council will not only contribute to the reduction in nitrogen oxide emissions across the District and beyond but also contribute towards the reduction in the amount of harmful air pollutants such as volatile organic compounds and sulphur dioxide.

7 Appendices

Appendix 1: CCDC Potential Future LEVI Programme Sites

Appendix 2: Key Timescale & Key Dates - LEVI Programme Next Steps

Appendix 3: SCC Public EV Charging Strategy V3

8 Previous Consideration

A report sharing the Staffordshire CC Electric Vehicle Strategy was brought to Cabinet in August / September 2023.

9 Background Papers

None.

Contact Officer: Gabrielle Whitehouse

Telephone Number: (01543) 464 770

Report Track: Cabinet: 18/07/24

Key Decision: No

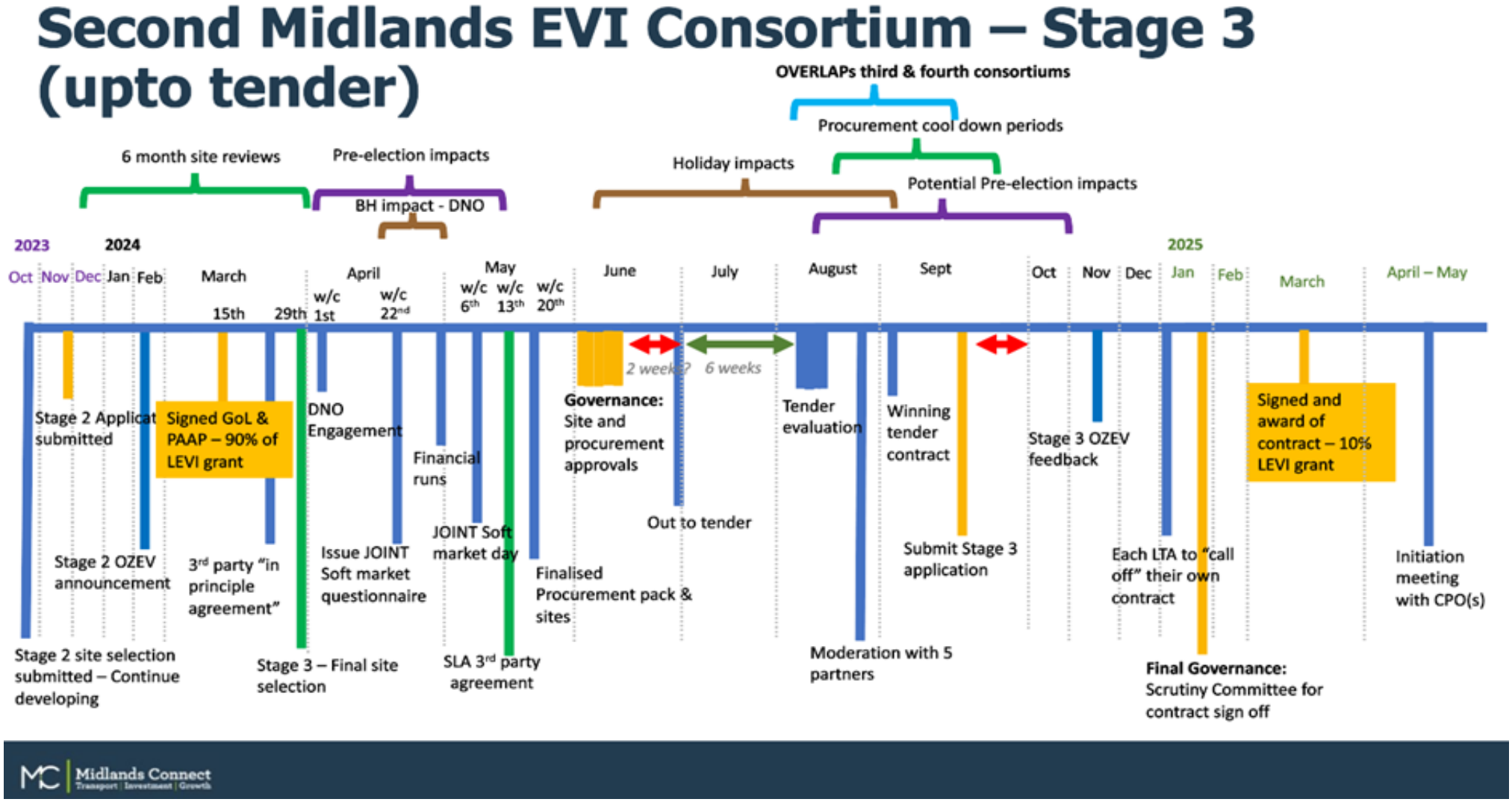
Item No. 8.5

Appendix 1

Potential Future LEVI Programme Sites

Local Authority	Parish	Ward	Name	Postcode (Est.)	# of Residents (within 3 minutes walk)
Cannock Chase	Bridgtown	Cannock Longford and Bridgtown	North Street	WS11 0AZ	73
Cannock Chase	Bridgtown	Cannock Longford and Bridgtown	Broad Street	WS11 0DA	76
Cannock Chase	Bridgtown	Cannock Longford and Bridgtown	New Street	WS11 0DH	104
Cannock Chase	Heath Hayes and Wimblebury	Heath Hayes and Wimblebury	Hednesford Road	WS12 3XR	80
Cannock Chase	Rugeley	Western Springs	Bees Lane	WS15 2DR	99
Cannock Chase		Cannock Park and Old Fallow	Beecroft Road	WS11 1JR	31
Cannock Chase		Chadsmoor	Burns Street	WS11 5EZ	92
					555

Key Timescale & Key Dates - LEVI Programme Next Steps



Item No. 8.7

Appendix 3

Staffordshire County Council Public Electric Vehicle Charging Infrastructure Strategy

Staffordshire County Council EV Charging Strategy

18/01/2023

amey consulting

Foreword

Climate Change is a huge issue that affects us all. Staffordshire County Council (SCC) declared a climate change emergency in 2019 and made a firm commitment to achieve net zero carbon emissions by 2050.

Since 2019 we have reduced our own carbon emissions by 43%, but SCC and the entire public sector only account for 2% of all emissions in Staffordshire. Transport accounts for around 40% of the county's total annual carbon emissions, and as well as contributing to climate change, has a major impact on public health.

We have a role to play in inspiring and facilitating more people to switch to greener and active travel, such as walking and cycling, or the use of electric vehicles (EVs). Indeed, the Government has banned the sale of all new petrol and diesel cars beyond 2030.

However, it is essential that Staffordshire has a convenient and accessible network of EV charging points. While it is not the county council's role or responsibility to install the charging points, we know our communities, and we want to work with and partner local authorities and the private sector

This strategy sets the scene for why we need to act, explains where we are and outlines the role that Staffordshire County Council will play.

Cllr David Williams
Cabinet Member for Highways and Transport

Executive Summary

In 2019, Staffordshire County Council (SCC) declared a climate emergency and committed to becoming net carbon neutral by 2050. To achieve this, the Council reviewed its operations and activities as well as putting in place a monitoring and evaluation programme to track progress.

Transport is a major contributor to the climate, health and ecological challenges being faced. In June 2019, the UK Government acknowledged this and announced ambitions for the transport network to be net zero by 2050. This was followed in November 2020 by an announcement of the ban on new petrol and diesel car sales by 2030. These are amongst the early steps in transitioning to sustainable modes of transport and the increased use of Electric Vehicles (EVs) will support the push to net zero. Further steps will be needed to encourage the removal of all petrol and diesel cars, including the growth of a viable second-hand EV market to reduce vehicle costs.

To support the move to EVs and other electric modes of transport, an EV charging network is essential. While it is not SCC's role to install and maintain the charging network, as the highways authority, a major land and asset owner, and our commitment to achieving net zero, we do have an important coordinating and facilitating role. SCC therefore commenced a concerted effort in 2019-20 to kick-start EV charging for the public but then COVID-19 struck, and this early work was stalled. SCC re-invigorated this work in late 2021 through commissioning Amey Consulting to work alongside them. This support facilitated the gathering of knowledge, developing a strategy and action plans whilst supporting all the Staffordshire district, town, and borough councils by bringing everyone together to increase understanding, provide a framework, and assist in the decision-making process.

EV car ownership sits at about 1% of the total UK car fleet in late 2021 and this is expected to increase to around 10% over the next three years. As battery technology improves, traveller range anxiety has lessened and price parity between combustion engine cars and EV cars is on the horizon (expected around 2026). Access to a usable and convenient charging network will therefore encourage further uptake of EVs and help to reduce inequalities in accessing this essential technology.

New government guidance now mandates EV charging in some car parks and most new homes. The newly published 'UK EV Charging Strategy' [1] along with this 'SCC Public EV Charging Strategy' will be crucial components in outlining how a charging network should be developed, where chargepoint

installation should be considered, and how SCC will provide coordination to local councils towards their successful installation of chargepoints.

This SCC Public EV Charging Infrastructure Strategy analyses various areas including policy, funding, and technology. The strategy identifies five types of charging solutions: EV charging hubs, EV forecourts, on-street charging, residential off-street parking, and off-street charging. The strategy also delves into the current and forecasted demand for each of the districts and boroughs and for the whole of Staffordshire, to inform strategic decision making. This document recommends broad locations across the county that should be considered for charging infrastructure and the optimal solutions that are most appropriate to match current and anticipated demand.

This document will be updated following receipt of additional guidance on EV strategies issued by the DfT in connection with Local Transport Plans.

Contents

Tables

Figures

1. Glossary of Terms

BEV – Battery Electric Vehicle

Chargepoints – The physical devices that deliver electricity to EV's

DNO – Distribution Network Operator (electricity companies!)

EV – Electric Vehicle

EV Forecourt – Fuel stations that include chargepoints

EV Charging Hub – Fast, rapid, or ultra-rapid chargepoints at a specifically designed location

Hybrid – A vehicle that combines an electric motor supporting an Internal Combustion Engine

ICE – Internal Combustion Engine (usually petrol or diesel)

kW / kWh – Kilowatt / kilowatt hour – measure of power

Off-street Charging – Chargepoints in car parks

On-Street Charging – Chargepoints located on streets

PHEVs – Plug-in hybrid electric vehicle

Residential Off-street Charging – Private chargepoints installed by users at their residence

Smart Charging – This refers to electric vehicles and chargepoints sharing a data connection

'the area' – Refers to any locations or facilities within Staffordshire County Council boundaries

'the borough' - Refers to any borough council within Staffordshire

'the district' – Refers to any district council within Staffordshire

'the council' – Typically refers to Staffordshire County Council

SCC – Staffordshire County Council

ULEV – Ultra low emission vehicle

User – Electric vehicle owner or user and chargepoint user

2. Introduction

Staffordshire County Council (SCC) has commissioned Amey Consulting to create a Public Electric Vehicle (EV) Charging Infrastructure Strategy. This will explore how the council can facilitate the growth of charging infrastructure across the county working with the 2nd tier districts and boroughs. This strategy will be created to coordinate the development of accessible chargepoints across the county and support local authorities, residents, businesses, or others looking to install chargepoints through providing information and guidance. Though it is recognised that commercial companies will provide charging, the role of the authority is to coordinate and therefore facilitate the development of a charging network that meets the needs of the people of Staffordshire. Within this role, issues including distribution, reducing risks of poorly located and/or insufficiently maintained infrastructure and accessibility will be overcome.

The strategy will cover public EV charging infrastructure and key policies and regulations at both a local and UK level that impacts charging requirements. Amey Consulting will also explore existing and future technologies, funding procurement and delivery methods at a local level, as well as commercial models which might be appropriate for the council and included districts.

The second aspect of the strategy is to establish the likely current and future demand for EV charging infrastructure across Staffordshire, aligning to the Council's wider net zero policies. From this demonstrable demand, the propensity to use EVs will be mapped, forming the basis of the location selection for EV charging infrastructure and feeding into the final output of an Implementation and Action Plan.

The strategy will support all modes of sustainable transport and ensuring improvements enhance the full transport offering within Staffordshire. To achieve this, consideration was also given to the potential modal shift that new EV charging infrastructure could bring.

This strategy supports SCC's environmental objectives towards achieving net zero emissions by 2050, across every aspect of SCC's service provision and estate:

- Organisational Carbon Reduction (reduce the carbon impact of council services)
- Improve Air Quality (improve the health of individuals through improved air quality)
- Supporting Behavioural Change

To support the delivery of the strategy, SCC and Amey have held meetings and review workshops with the individual district and borough Councils in Staffordshire as well as internal SCC stakeholders. These helped ensure that the councils and the user needs were embedded into the long-term strategy and implementation plans. Review sessions and other meetings have been held to ensure that iterative feedback has been incorporated into this report.

3. EV Charging Context

SCC recognise that climate change is the biggest environmental challenge facing the world today and has reflected this by identifying climate change as one of the five key principles in the Council's Strategic Plan. SCC recognises that actions are needed to minimise the Council's net carbon emissions. These actions are to either stop carbon emissions, develop ways to remove carbon that is already in the atmosphere (sequestration) or help communities and business prepare for the impact of changing climate (adaptation).

EV adoption forms a crucial part of tackling climate change, along with the decarbonisation of transport in Staffordshire, which forms a key objective of Staffordshire's 2021-2025 Climate Change Action Plan.

Reference	Description	Action	Proposed timeline
CN-08-21	Increase the number of Electric Vehicle (EV) charging points.	Work with district and borough councils to agree a consistent approach to EV infrastructure across Staffordshire.	Mar 2023
		Investigate the potential to upgrade electricity supply in SCC building stock to facilitate EV charging in retained property portfolio.	Mar 2022
		Develop an EV Infrastructure Strategy and Low Emissions Vehicle Infrastructure Action Plan	Mar 2024
		Maximise opportunities to bid for Department for Transport funding, including workplace charging fund (at SCC buildings) and on street residential charging fund.	From Nov 2021
		Work with Amey to roll out EV charging across all highway's depots.	From Nov 2021

Table A: Carbon Reduction - CCAP - Chargepoints

The 2011-2026 Local Transport Plan highlights the need to reduce the reliance on private vehicles and support active travel and other modes, it acknowledges that cars will still play a role in the transport choices for many.

The availability of charging infrastructure across Staffordshire county can provide an important focus on encouraging the growth in use of EVs, whilst also supporting the rural community. Midlands Connect, who research and develop transport projects, also acknowledge the significance of EVs and EV infrastructure in the movement to decarbonisation.

At the end of May 2022 there were 32,312 charging points across the UK, at 19,945 charging locations, with a steep increase in growth from 2019 onwards. This represents a 32% increase in the number of charging devices since May 2021 [5].

Staffordshire Local Transport Plan (2011-2026)

Reducing Road Transport Emissions and their Effects on the Highway:

- We will promote alternatives to private motor vehicles
- We will promote the use of low-emitting vehicles and vehicle efficiency
- We will lead by example and reduce our own road transport emissions
- We will improve the resilience of the transport network to changing climatic conditions

This is driven by an increased demand for EVs, with more than 300,000 BEVs and 600,000 PHEVs on UK roads in 2021. As the number of EVs grow, retailers, supermarkets and other public facing organisations with car parks look to partner with chargepoint suppliers and provide their customers and

visitors with the required charging. Demand for EV charging could well be at around 300,000 chargepoints by 2030 [6].

Location	Total public charging devices	Total public rapid charging devices (25kW+)	Public rapid chargers as a % of total public charging devices	Charging devices per 100,000 population
UK	28,375	5,156	17%	42.3
West Midlands	1,969	495	25%	31
Staffordshire	239	105	46%	26

Table B: EV charging stats Jan 22 DfT EVCD_01a/b

In Staffordshire there are approximately 450,000 petrol and diesel cars, and approximately 4,500 EVs registered across the respective districts and boroughs. There has been steady growth, but this is expected to increase dramatically in both the number of EVs registered and the number of chargers; all of which will contribute to the councils across Staffordshire reaching their respective net zero ambitions.

Location	ULEVs (all)*	BEV**	PHEV**	Motorcycles**	LGV's (all)**
United Kingdom	621,564	314,966	271,930	8,132	24,697
England	554,656	*281,219*	*242,794*	*7,260*	*22,050*
West Midlands	42,391	*21,721*	*18,753*	*560*	*1,703*
Staffordshire	4,558	*2,315*	*1,999*	*60*	*182*

Table C: ULEV's Q3 2021

*Data from DfT VEH0131, Q3 2021
**Data from VEH0133, Q3,2021
Data in italics extrapolated from VEH0131/VEH0133

Research conducted by Ordnance Survey, Zap-Map and Field Dynamics has identified that across Staffordshire, on average 75% of households have access to off-street parking and of those households that do not have off-street parking, on average of 3% of households are within a 5-minute walk from a public chargepoint. The 97% of households that do not have access to off-street parking and are not within a 5-minute walk of a public chargepoint equates to approximately 92,000 households. A public chargepoint infrastructure network should prioritise solutions that enable an equitable and accessible network for these 92,000 households.

Council	Percentage of households with access to off-street parking	Percentage of households within a 5-minute walk of a public charger
Cannock Chase	79%	1.8%
East Staffordshire	67%	5.2%
Lichfield	76%	11%
Newcastle Under Lyme	76%	0.5%
South Staffordshire	77%	2.5%
Stafford	75%	5.6%
Staffordshire Moorlands	80%	0.9%
Tamworth	71%	0.1%

Table D: Source: National Ranking of EV Charge Point Coverage, ZapMap & Field Dynamics

At present, any Staffordshire resident wishing to install an electric charging point can currently do so on their own private property (private on-street charging points are currently not available). There is a government grant available where a maximum of £350 is available to assist some residents with the initial upfront cost of installing an EV charging point [2]. However, there is a proportion of residents in Staffordshire who do not have off-street access, and for these residents most of the on-street parking is currently outside of the catchment area for public EV charge points (greater than a 5-minute walk).

Supermarket Charge Point Operator Partnerships in Staffordshire

Tesco - Podpoint

ASDA – BP Pulse

Aldi – NewMotion

Lidl - Podpoint

Morrisons – GeniePoint

Co-op - ZeroNet

Within the Midlands Connect EV Strategy, the identification of optimum locations for charging infrastructure has been recognised as a critical component of the deployment of a charging network, where locations have a variety of needs. Ensuring that those residents who don't have off-street parking options are still able to access chargepoints.

For greatest impact in meeting requirements for supporting those who wish to switch to EVs, the local authorities should coordinate the installation of chargepoints at workplaces or retail parks, improving EV catchment of off-street parking, and especially installing chargepoints in council owned and managed car parks. This could help the local councils to ensure the futureproofing of their infrastructure, providing chargepoints as the demand continues to increase.

It has been indicated by the UK Government that further policies will be released that will focus on Electric Vehicles and EV charging infrastructure in the next 12-24 months, along with funding to continue support for local authorities in their journey to decarbonisation. Midlands Connect is also planning continued support through establishing an EV forum, engagement with Distribution Network Operators (DNOs) and planning tools. In addition to the Government's on-going developments, the private sector has also continued the growth of charging networks across the UK, such as in petrol stations, supermarket car parks and retail parks. However, within Staffordshire this number remains low.

3.1. Midlands Connect

The Midlands Connect (MC) report 'Supercharging the Midlands' [3] summarises the key findings and analysis from their study of the MC region; providing guidance and principles to support the accelerated uptake and provision of EV charging infrastructure in the region. The report presents the baseline and forecasts for 2025 and 2030. MC also published their Rural Mobility Hub report [8] to help local authorities identify and establish commercially viable rural mobility hubs. This will generate new ideas during 2022 for an era of greater digital connectivity, and in the context of rural community needs [7].

EV's registered	Baseline 2020	2025	2030
Scenario 1 – slow uptake	44,909	344,951	1,304,156
% EV	0.74%	5.6%	20.9%
Scenario 3 – accelerated uptake	44,909	642,762	2,527,845
% EV	0.74%	10.5%	40.6%
Chargepoints forecast	2,174 (Jan 2021)	9,915 – 25,703	21,988 – 77,533

Table E: Midlands Connect MC region forecasts

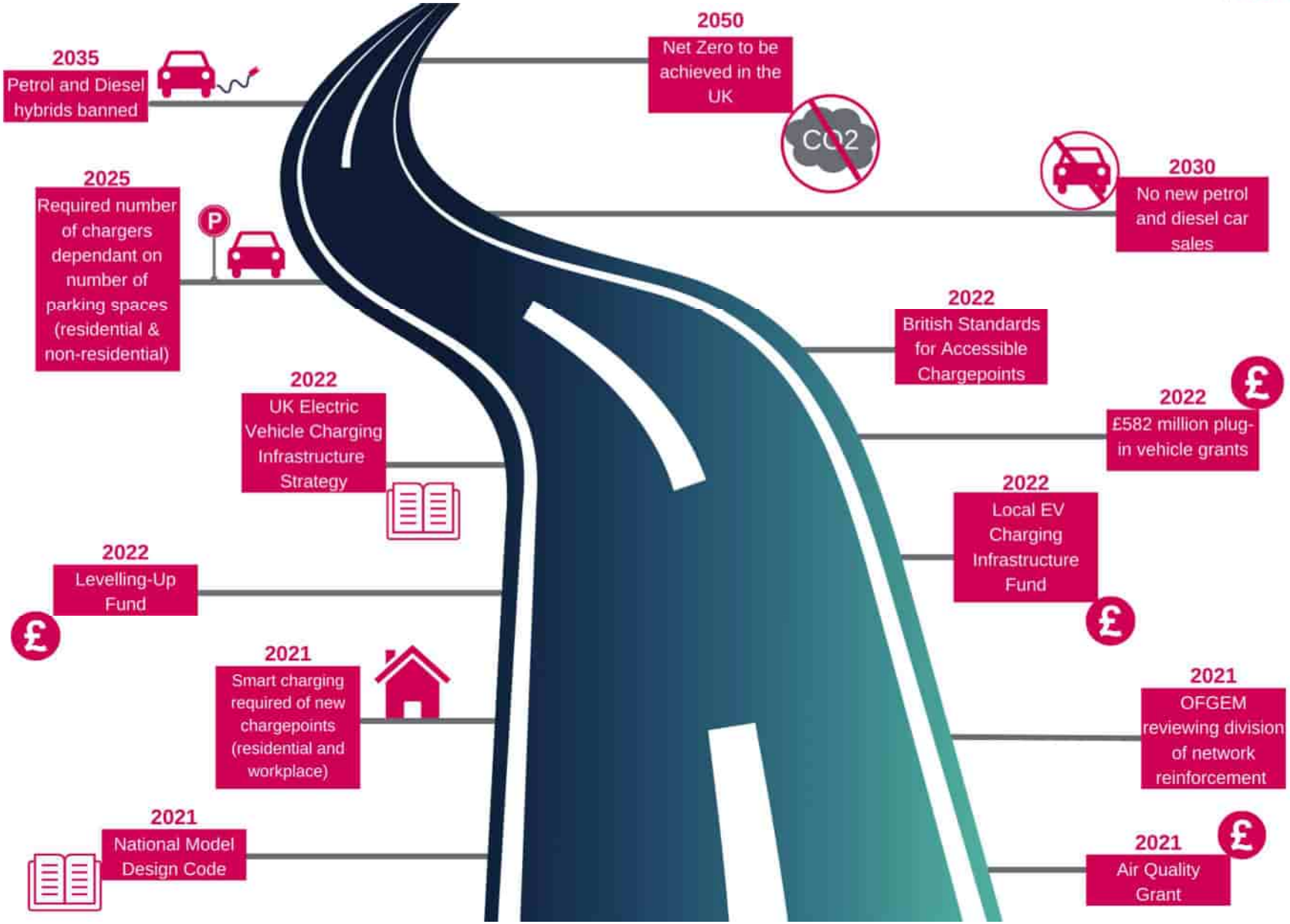


Figure 1: EV landscape roadmap

4. Policy and Funding Review

Over the last five years there has been continued growth in investment in charging infrastructure and policies that acknowledge the critical role that charging infrastructure has in the continued uptake in EVs. The announcement of the Rapid Charging Fund as part of the March 2020 budget saw £500 million committed to supporting the growth of a high-powered charging network across the UK. At the same time as announcing the funding, clear charging infrastructure aims and objectives for the UK were published. These aims included having 6 high-powered open access chargepoints at each motorway service area in the UK by 2023. It is understood that the demand for charging infrastructure will continue to increase, and the introduction of these policies aims to ensure this demand will be met. The policies and funding available for charging can be leveraged to help Staffordshire to meet their net zero ambitions.

Coordinating a wider EV charging network in Staffordshire will not only support the private use of EVs but can also be beneficial to businesses and workplaces who will need to move to electric fleets. The new legislation that bans new petrol and diesel cars being sold in the UK from 2030 will further drive movement away from petrol and diesel vehicles and towards low carbon alternatives.

This section of the strategy outlines the policies and funding that are and will continue to be most impactful for Staffordshire's short and long-term EV network plans. The policy and funding review focusses on five key areas of impact:

- **Chargepoint technology** – specifications for the charge point technology or where the policy supports the development of new technology
- **Chargepoint installation** – specifications on installation either on the number of charge-points available or the locations
- **Commercial requirements** – specifications for the operators or support for operators
- **Building regulations** – guidance on how charge-points should be incorporated into planning and planning decisions
- **Consumer protections** – specifications as to what operators and charge-points must provide to consumers

In addition to these five key areas, we have highlighted the chargepoint infrastructure solutions the policies are relevant to; whether responsibility for meeting the requirements falls to the public or private sectors; and have examined any available funding which supports meeting the policy aims. A summary of the information contained within the policies reviewed can be found in the local policies table below.

This information has been distilled into the roadmap presented above to demonstrate the key policies and funding milestones until 2050. Continued funding will enable SCC to adhere to both UK-wide and internal policies; the Council should seek to support government consultations to ensure the Staffordshire voice is heard.

Current national policies are displayed in Appendix D, whereas the local policies are set out in the table below.

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
Local Policies							
Staffordshire Local Transport plan 2011-2026	The plan sets out the County Council's proposals for transport provision in the county, including walking, cycling, public transport, car-based travel and freight, together with the management and maintenance of local roads and footways.	2011	• Investigating measures that will encourage the use of low-emitting vehicles such as the development of EV charging points. • Replacing SCC vehicles (when required) with ones that are less polluting and more fuel efficient, wherever possible. • Reviewing SCC staff car parking facilities • Encouraging public transport operators that when replacing vehicles, they consider purchasing lower emitting vehicles.	• Promoting (and running) schemes that encourage the take up or smarter travel modes • Introducing Traffic Regulation Orders (such as clear zones, low-emission zones and no stopping/parking zones) • Encouraging all owners of the transport network to manage, maintain and develop with climate change in mind.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• On-Street Residential Chargepoint Scheme	Medium – 2 - 5 years +
Staffordshire Climate Change Action Plan 2021-2025	SCC recognises that a range of actions are needed to stop or reduce the Council's carbon emissions. These actions are to either stop carbon emissions, develop ways to remove carbon emissions, or help communities and businesses prepare for the impact of a changing climate. The Council will monitor its carbon emissions each year, to track the success of these actions. This plan will be reviewed annually to ensure that it continues to deliver the Councils commitment to the climate change agenda.	2021	• Increase the number of EV charging points • Investigate the transitions of Council fleet to alternative fuels or more carbon efficient options where appropriate by 2025.	• Work with district and borough councils to agree a consistent approach to EV infrastructure across Staffordshire. • Investigate the potential to upgrade electricity supply in SCC building stock to facilitate EV charging in retained property portfolio. • Develop an EV Infrastructure Strategy and Low Emissions Vehicle Infrastructure Action Plan • Maximise opportunities to bid for Department for Transport funding, including workplace charging fund (at SCC buildings) and on street residential charging fund. • Work with Amey to roll out EV charging across all highways depots. • Ensure sufficient resources are available to support business areas in identifying opportunities and understanding carbon impacts. • Continued liaison with district and borough councils to discuss how planning considerations can include climate change mitigation and adaptation.		• On-Street Residential Chargepoint Scheme	Medium – 2 - 5 years +
Staffordshire Climate Change Strategic Development Framework	SCC committed itself to the climate change agenda by declaring a climate change emergency in 2019 and to also achieve net zero carbon emissions by 2050. The Strategic Development Framework sets out how the authority will work towards achieving its carbon emissions target.	February 2021	• reduce vehicle emissions • reduce our overall carbon impact	• Ensure all council services understand the need to reduce our carbon emissions and are committed to doing so. • Be innovative, aspirational and positive leading by example. • Be positive in our approach, embrace opportunities and build on our successes. • Empower our staff and members to suggest solutions and commit to delivering the net zero target. • Have transparent processes and make the best use of the resources we have.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• On-Street Residential Chargepoint Scheme	Long - 5 years +

Table F: Policies review - Local Policies

5. Demand Analysis

5.1. Methodology

The focus of the demand analysis is to use data to create unique insight into the propensity to use EVs. The propensity to use EVs is directly linked to the requirements for charging infrastructure. Through specific analysis of data related to Staffordshire and its' districts and boroughs, a charging network is proposed to meet anticipated demand, local strategic objectives and existing and upcoming UK policies.

The analysis focuses on collating and mapping relevant data onto a GiS (geographical information system). GiS offers a unique ability to combine data that would not usually have been analysed together. For example, combining points of interest with the number of households with more than one car allows us to suggest the types of journeys being made. The use of GiS allows for the best use of the available data and ensures the analysis is tailored for the Staffordshire districts and boroughs.

The first step is to create a high-level demographic profile of those most likely to use EVs, using specific Staffordshire data. A matrix is created to assess all types of demographic data and identify areas where there is a highest likelihood of potential EV users. The output from the analysis is a propensity map of Staffordshire showing the areas of high and low propensity to use EVs

Further analysis is then undertaken to consider the infrastructure and journey data across the Council.

This level of assessment has provided unique insight across the county and allows for a charging network to be recommended to that considers the county wide perspective and the individual district and borough requirements towards a transition to EVs.

Demographic Assessment

The demographic assessment uses 2011 census data (This document will be revised when the 2021 census data becomes during late 2022) and additional local data available to the Council. The table below outlines the key datasets, the target population demographic and the rationale for including this sector within the intended audience.

Data	Target	Reason
Age	25-54 being the most ideal ranges	Those between these ages are the most likely to adopt new technology.
Household income	Minimum of £25k	The current cost of an EV can be prohibitive to lower incomes, but the funding available to support purchases of EVs supports this - as a minimum.
Household access to a car	Minimum one car	SCC is looking to support the transition to EV but are also looking to support modal shift away from car use.
Household employment status	Employed or a third level student	Those in employment are more likely to be commuting by car in the districts and boroughs, whilst students are likely to generate charging demand in the future.

Table G: Key demographic datasets

These data sets are chosen as the most impactful for those likely to adopt an EV in the future. This is expected to change as the expense of owning a private EV lowers and with the development of charging networks. These areas are scored based on the level of target demographics in the areas. These scores

are combined in a weighted overall score to create a demographic relative propensity map across Staffordshire for EV uptake.

Journeys Assessment

Journey information assessment uses the Propensity to Cycle Tool (PTC), open street map, and SCC provided data. This data is used to map commuter journeys, school journeys and journey purpose (or driver), such as to supermarkets, workplaces and tourist destinations. The current commutes, school routes and the number of these journeys taken by car to establish the number of switchable trips to EV. Where journeys were not able to be mapped, journey drivers were analysed and trips that would most likely be made by car were inferred.

Infrastructure Assessment

Infrastructure data is taken from Western Power Distribution (WPD), open street map, Zap-Map and SCC data. The table below outlines the key data sets and the reason for their inclusion within the analysis.

Data	Reason
WPD capacity map	Establish the location of existing sub-stations
Car parks	Establish demand for short-term charging and the car-parks ability to deliver this
Land ownership	Establish whether installation would be within SCC control
Planning applications	Establish growth in the area and opportunity for growth of off-street and off-street residential charging in line with new policy requirements for chargepoint installation in new developments
Fuel Stations	Establish existing network of fuel stations and infer transition of those fuel stations to EV forecourts as EV demand increases during phase out of petrol and diesel cars. Establish capacity to add to charging network at these locations.
Existing chargers	Establish locations and types of existing chargepoints

Table H: Key infrastructure datasets

These data sets have the highest impact on the development of the charging network both in terms of capacity and available space.

Combined Assessment

The propensity map serves as the base for the combined assessment and, from this, facilitates a focus on the high propensity areas that enables individual assessments. At this individual assessment point, the infrastructure is examined to ensure available space and no overlap with existing chargepoints.

Commuting

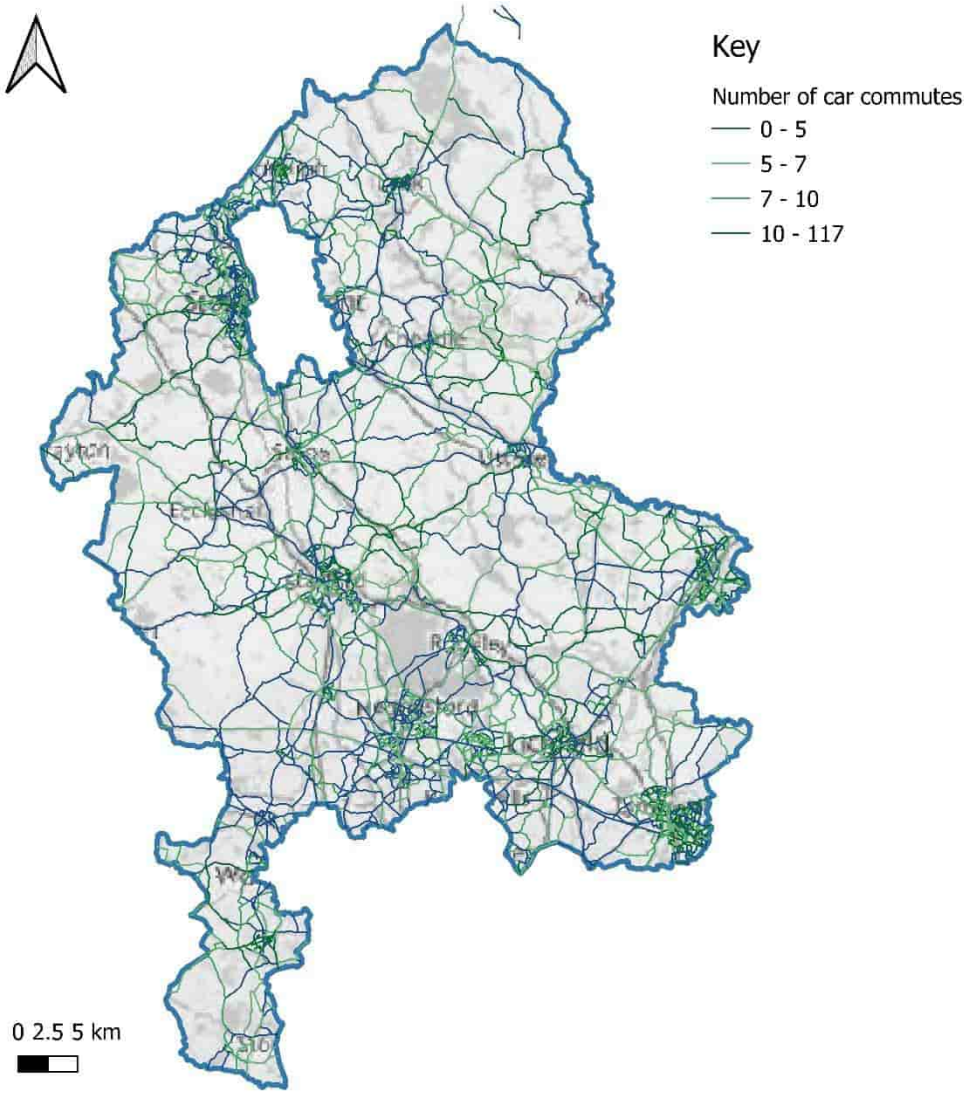


Figure 2: Staffordshire car commuting

The map shows the number of car commutes across Staffordshire. The data is sourced from the propensity to cycle map and shows general start and end points rather than door to door travel. This data is used to show both the number of commutes and the percentage of the commutes made by car. The areas with high car commutes are given the highest score as these areas would have the highest impact if switched to EV and would therefore require the largest number of chargepoints.

Points of Interest

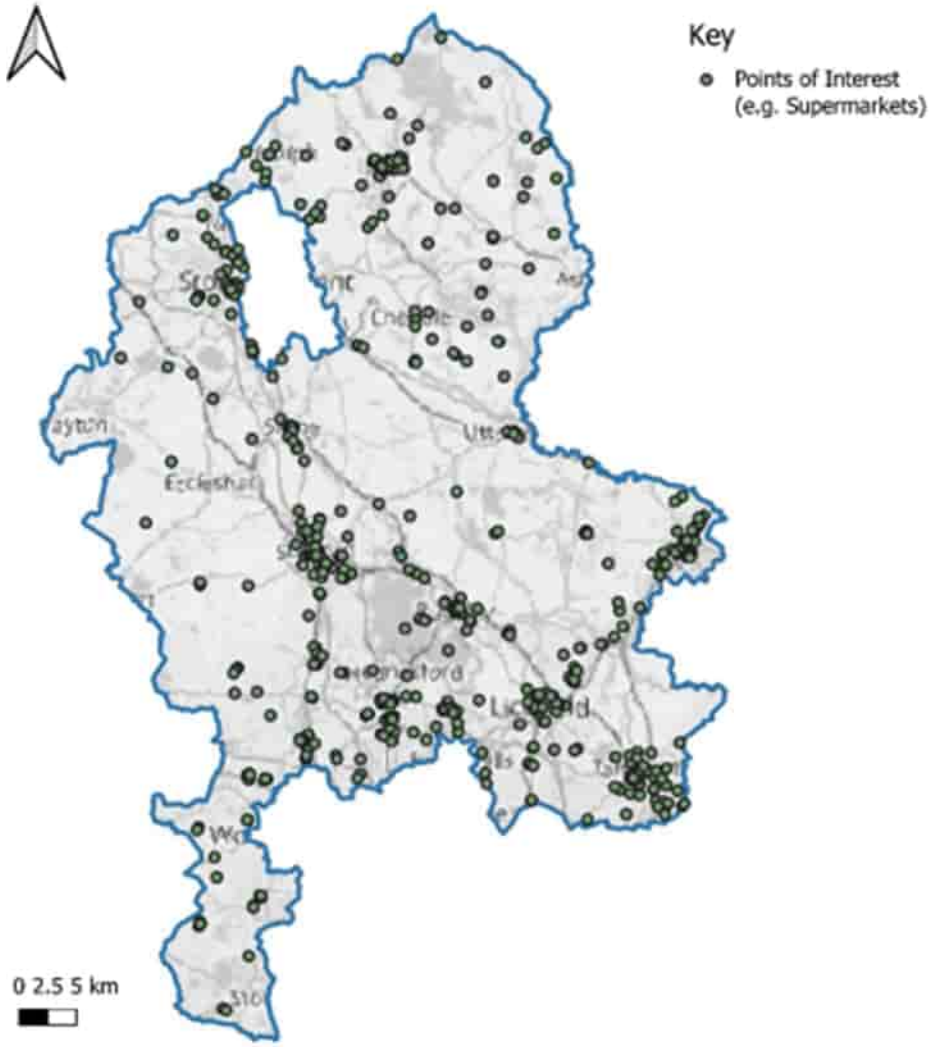


Figure 3: Staffordshire POI

The map shows a sample of points of interest that were mapped. The reason for mapping points of interest is to infer trip generators for example supermarkets, workplaces, tourists attaractions. This has been undertaken due to the unavailability of live people movement data that would have shown the mode and destination of those points of interest that were most likely to have a high number of car journeys and were therefore given a higher score.

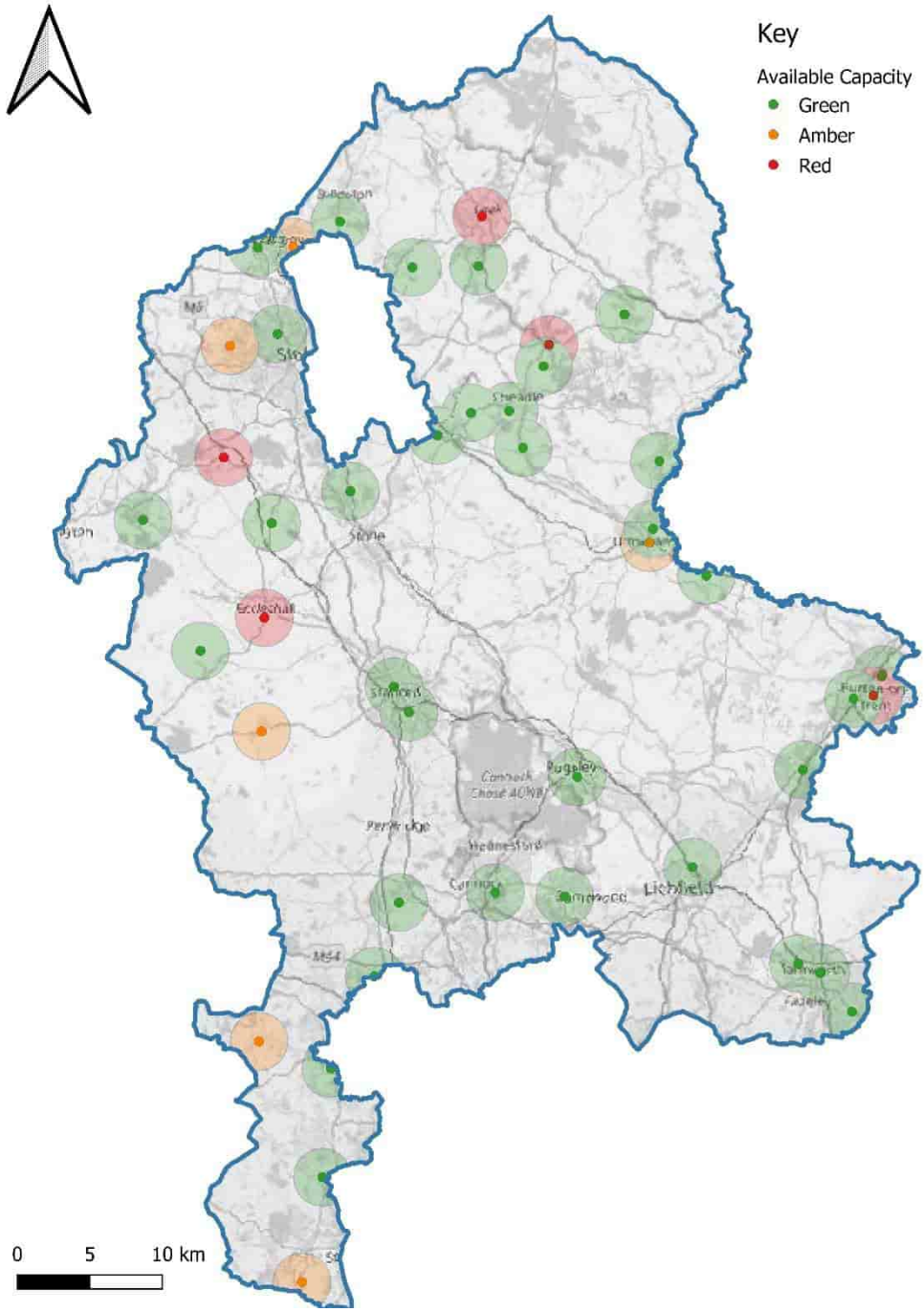


Figure 4: Sub-Station power capacity

The map shows all the Western Power sub-stations across Staffordshire; this gives some indication of where power is available across the power grid and where capacity may be more limited. This may be especially impactful when considering the location of rapid charging sites and hubs.

5.2. Demand Analysis – County Overview (2021/22)

Propensity map

The maps are divided up by districts or boroughs along the Lower Layer Super Output Areas (LSOA), these are government geographical areas also used for the Census, each LSOA area has an average of 1,500 people or 650 households.

It should be noted that the strongest likelihood of converting to EVs at this time is often in more affluent and rural areas, rather than in the more urban centres. Campaign targeting is guided by propensity; whilst EV charging infrastructure locations are more related to current and expected demand.

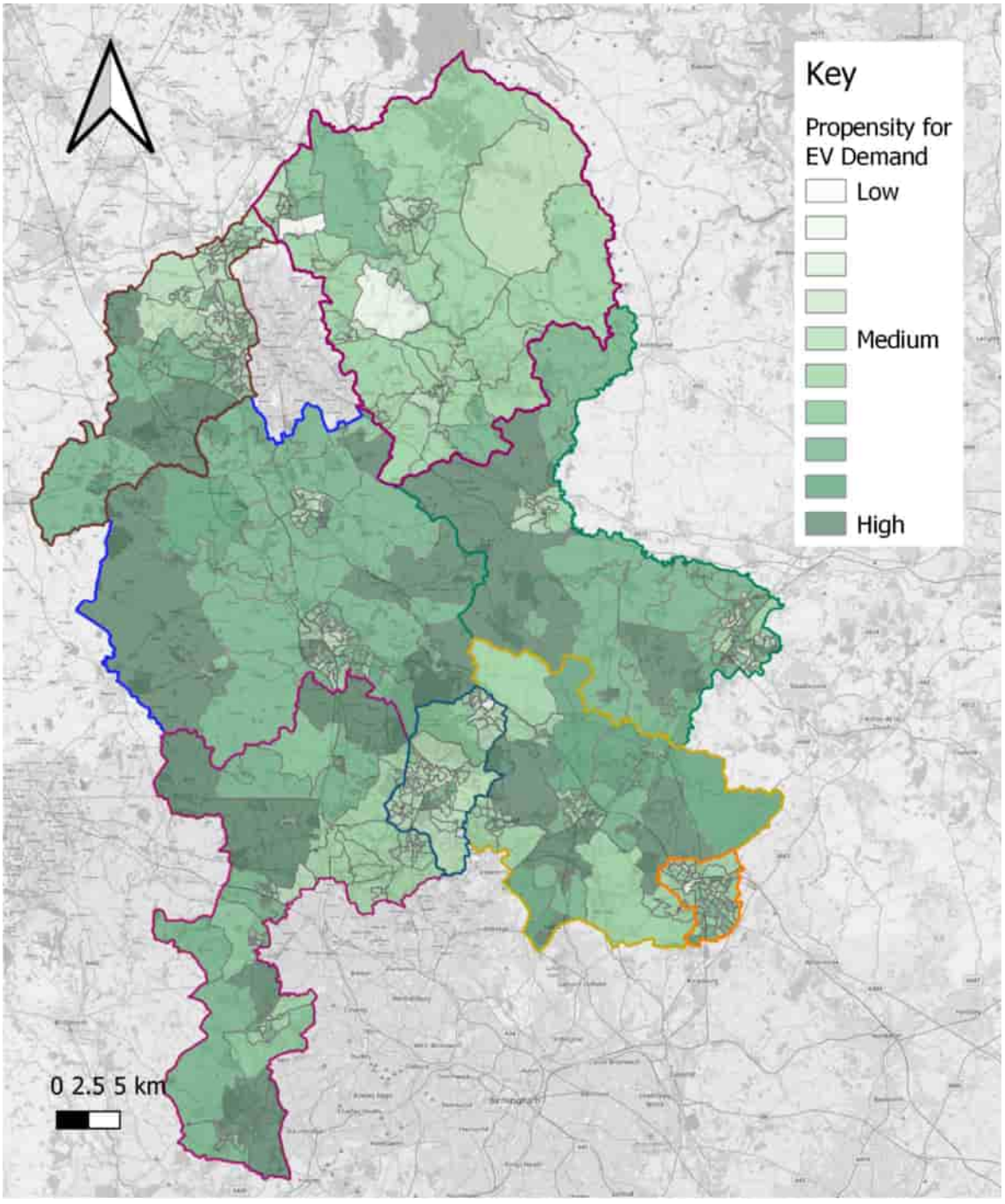


Figure 5: Staffordshire EV charging propensity

Suggested EV charging locations

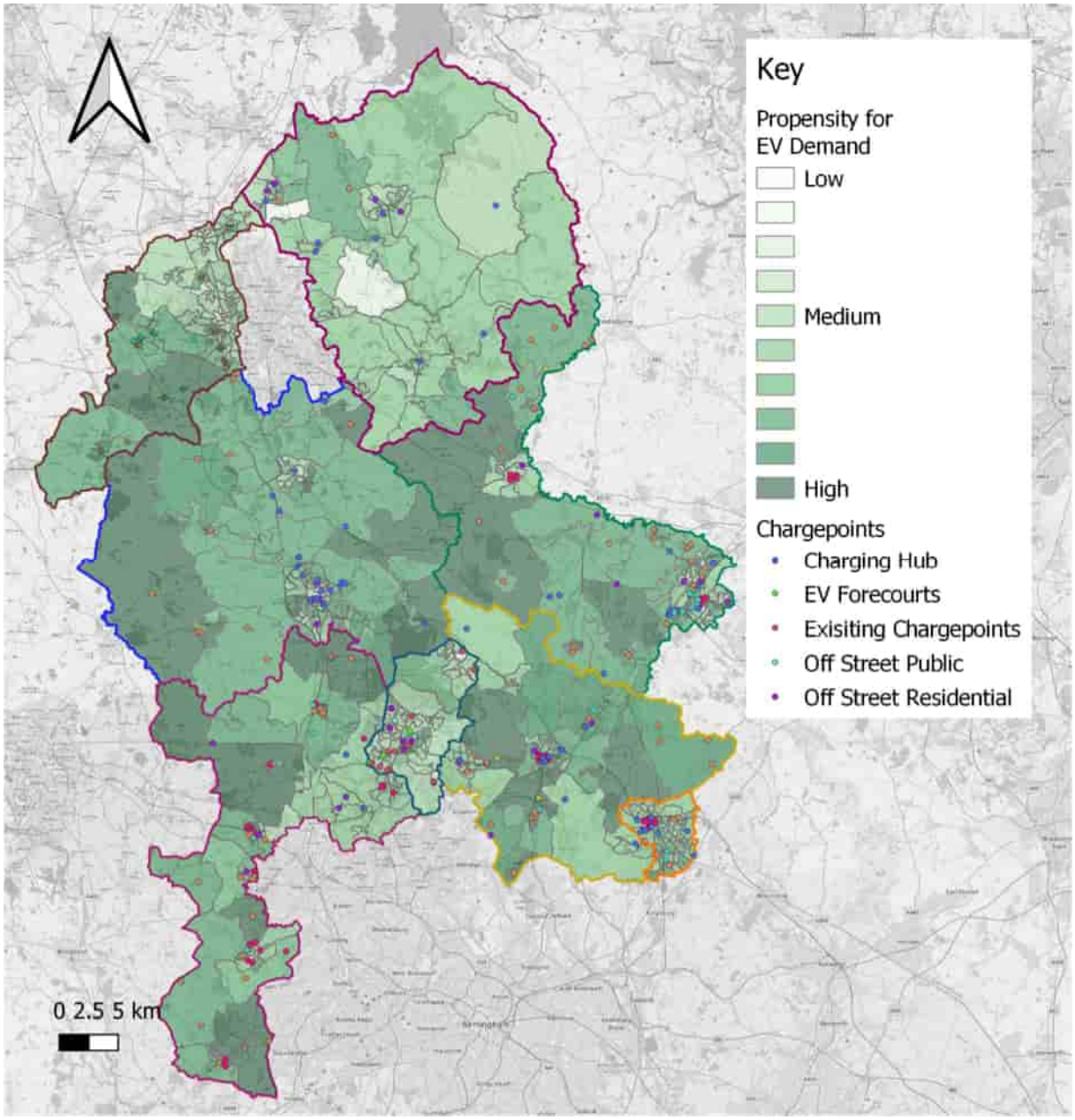


Figure 6: Staffordshire EV charging locations

Chargepoint Definitions:

- EV Charging Hub - Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations
- EV Forecourt – Existing fuel stations (highly likely to be converted to EV over the coming years)
- Off-street public – Suggested chargepoints at car parks
- Off-street residential – Suggested key council support areas for private chargepoints being installed at residences

For suggested chargepoints of off-street residential, EV charging hubs, and off-street residential the suggestions are locations within a 1km area

5.3. Demand Analysis – the District and Boroughs

Cannock Chase Propensity and Points of Interest

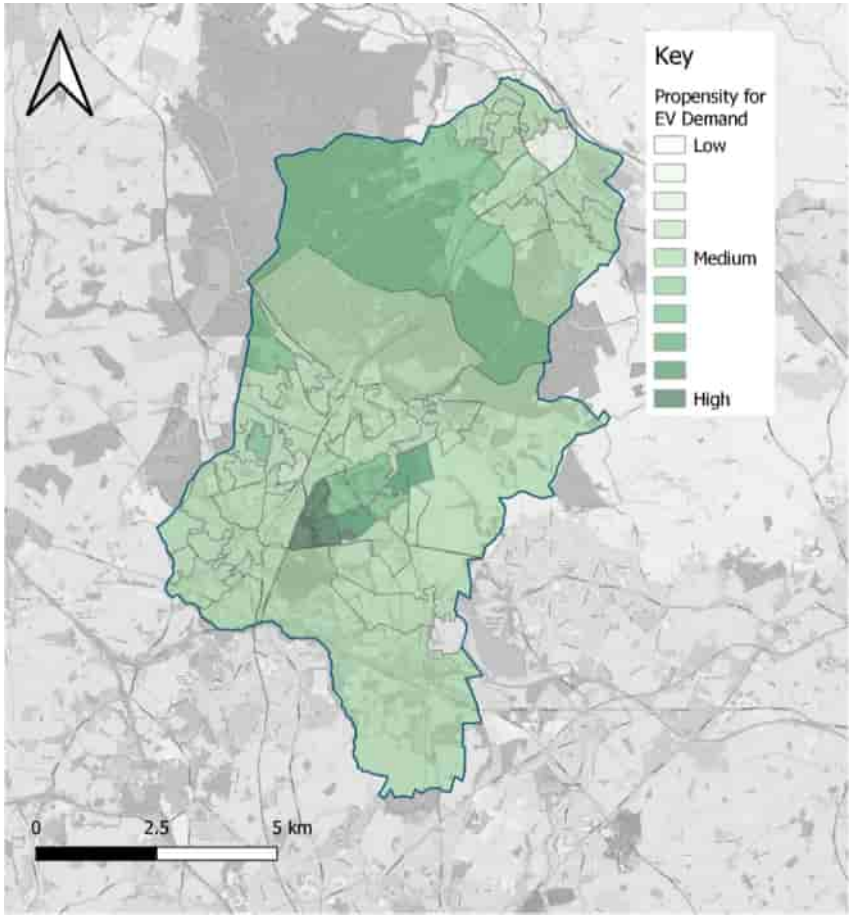


Figure 7: Cannock Chase Propensity

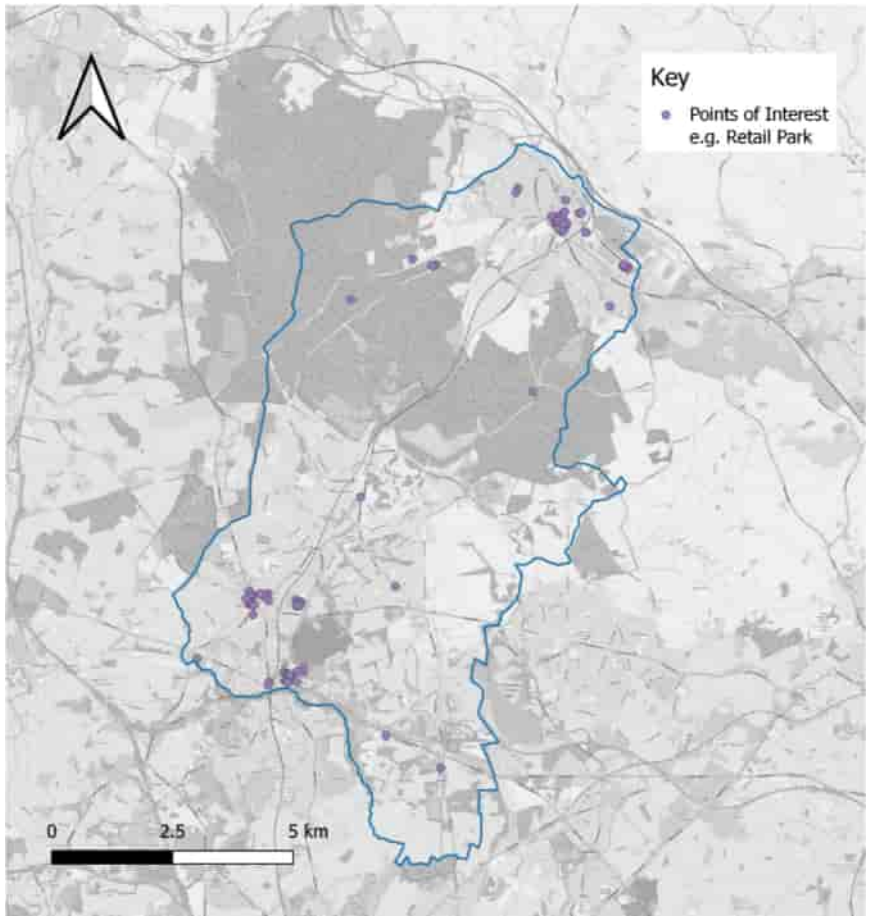


Figure 8: Cannock Chase Points of Interest

Cannock Chase – Proposed Locations

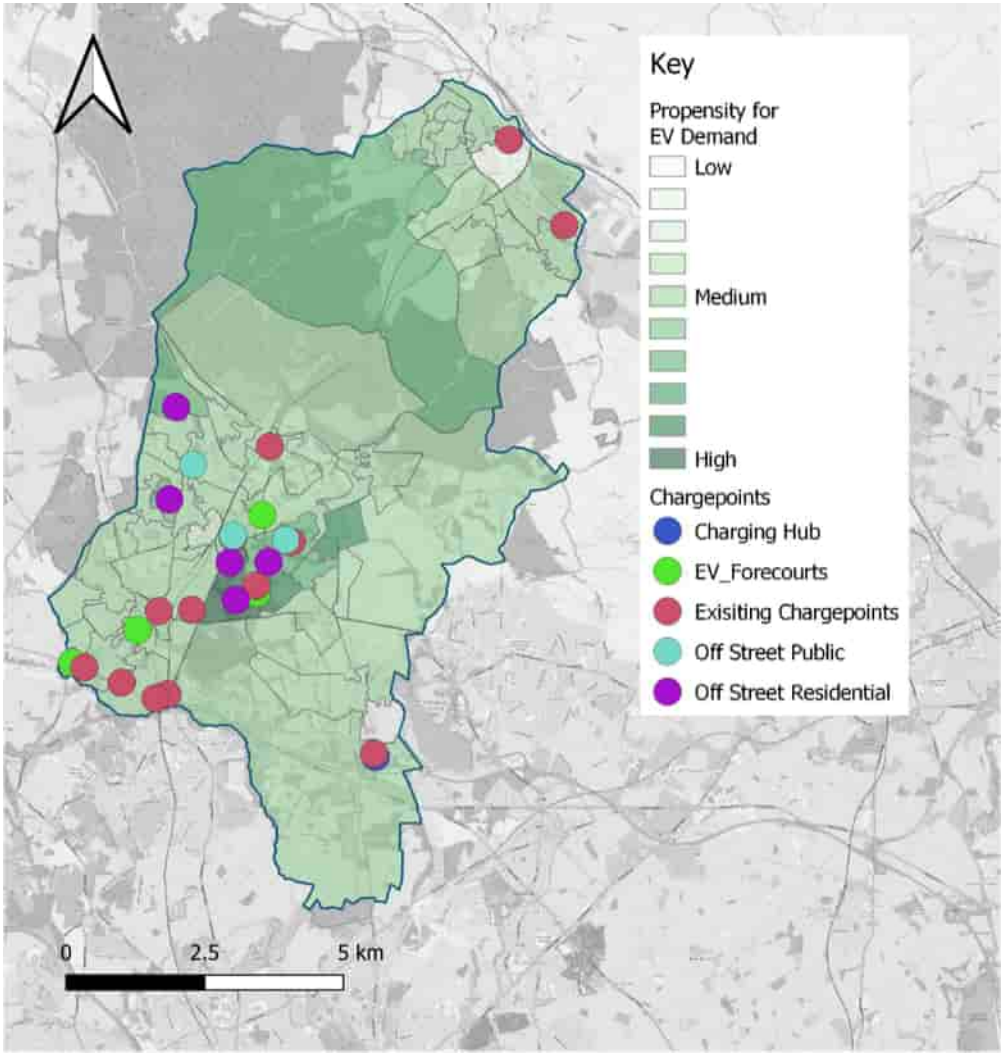


Figure 9: Cannock Chase - Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the district council to ensure ownership and facilitate EV charging installation	**Action**: The district council should engage residents and support where possible
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

East Staffordshire Propensity and Points of Interest

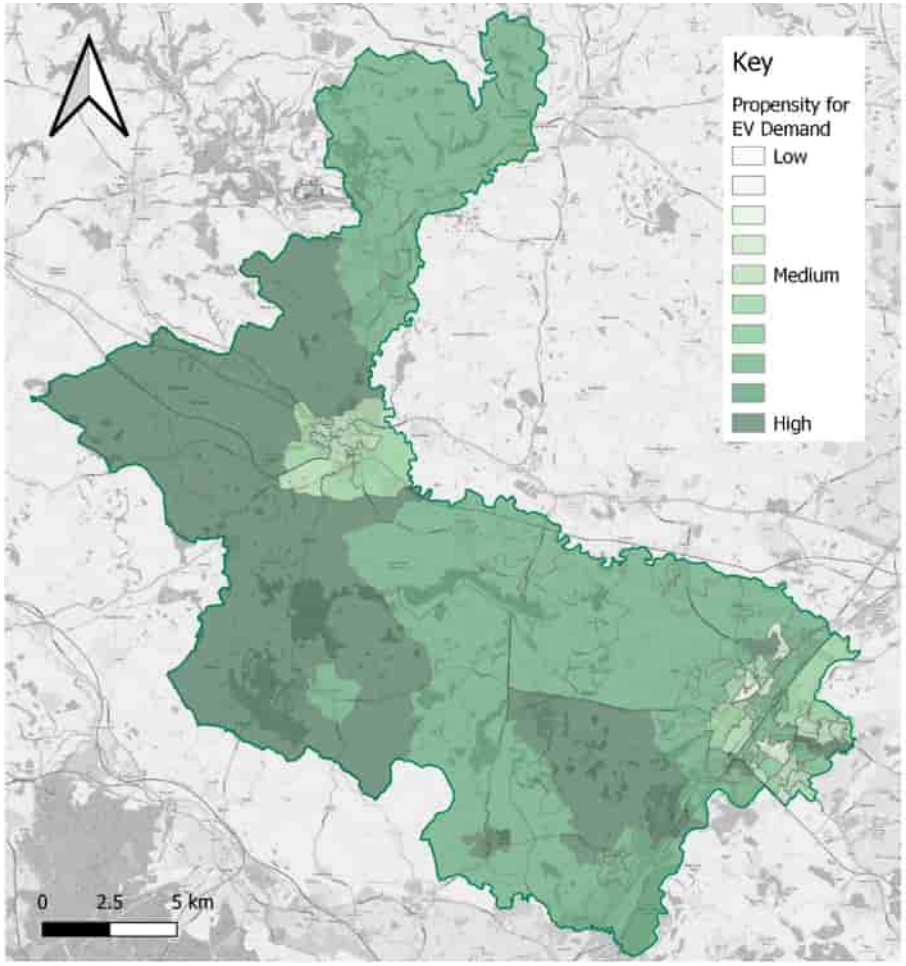


Figure 10: East Staffordshire propensity

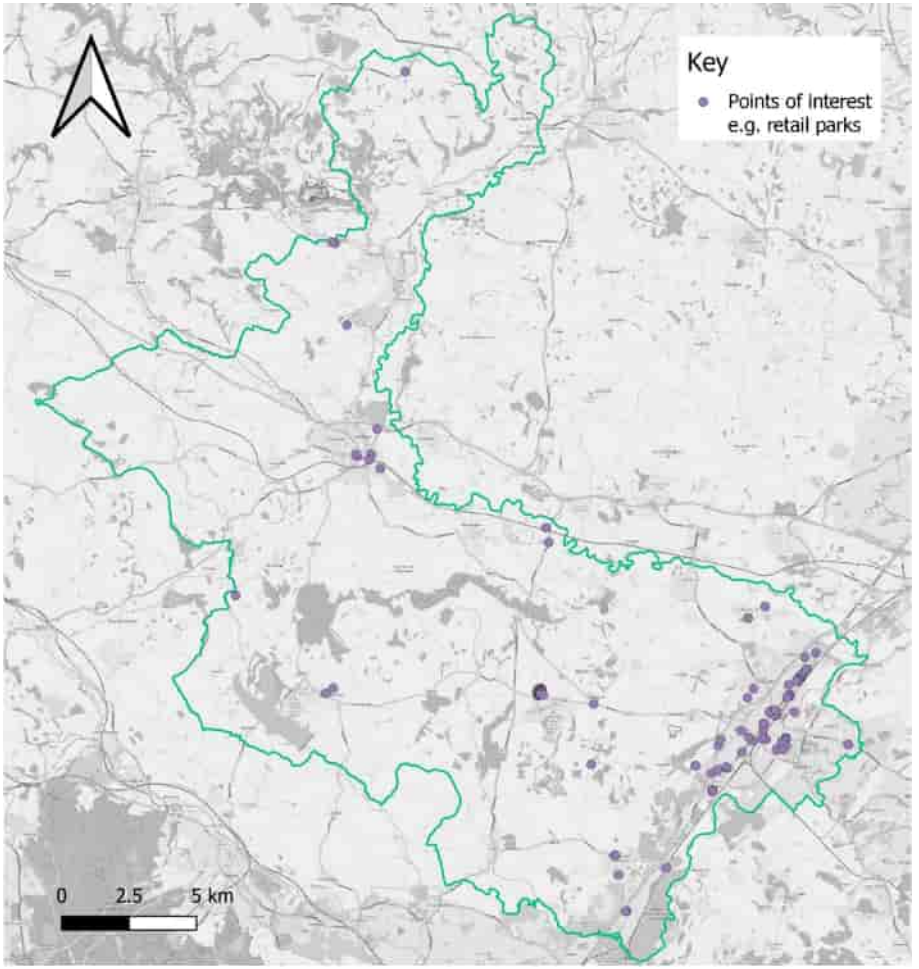


Figure 11: East Staffordshire Points of Interest

East Staffordshire – Proposed Locations

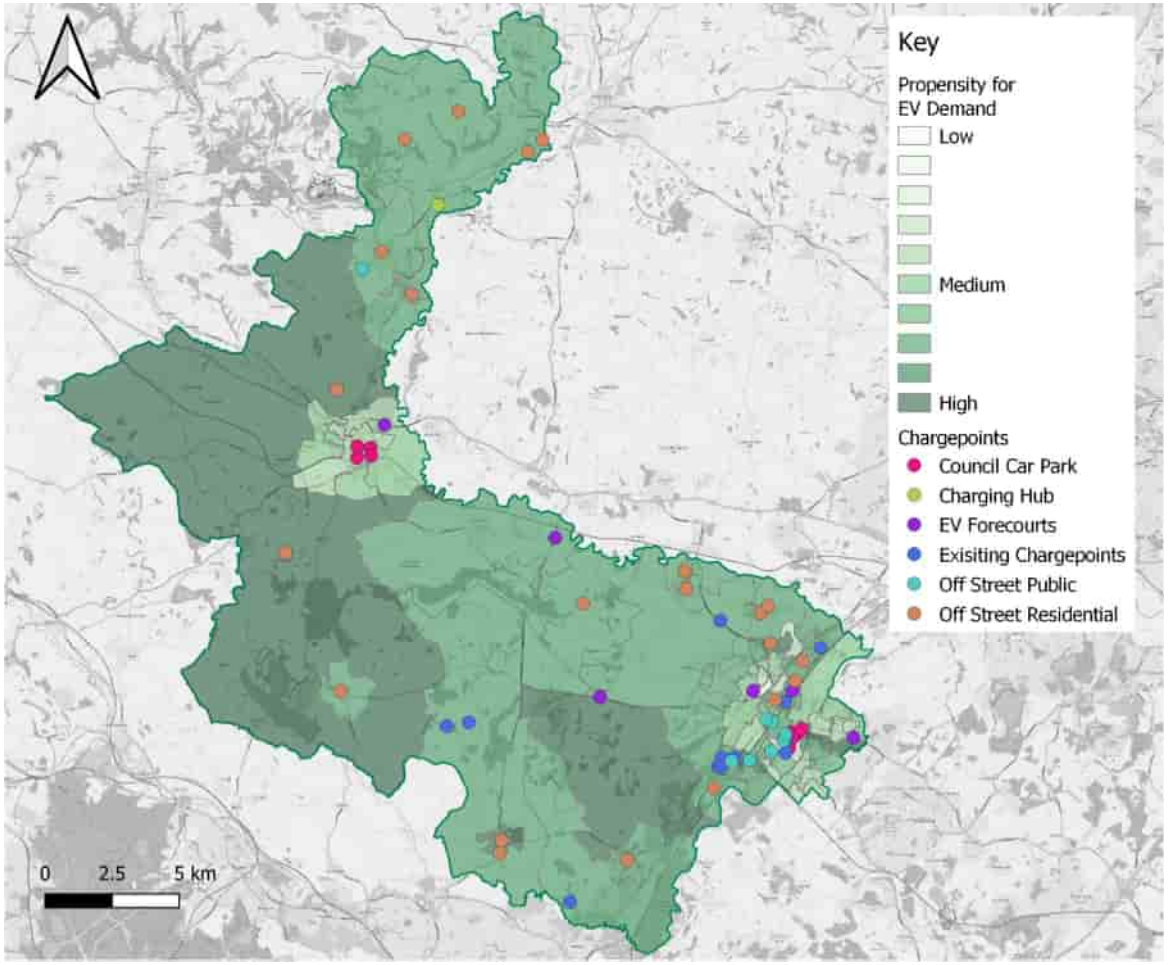


Figure 12: East Staffordshire Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the borough council to ensure ownership and facilitate EV charging installation	**Action**: The borough council should engage residents and support where possible
Council Car Park - Action: Engage with the borough council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

Lichfield Propensity and Points of Interest

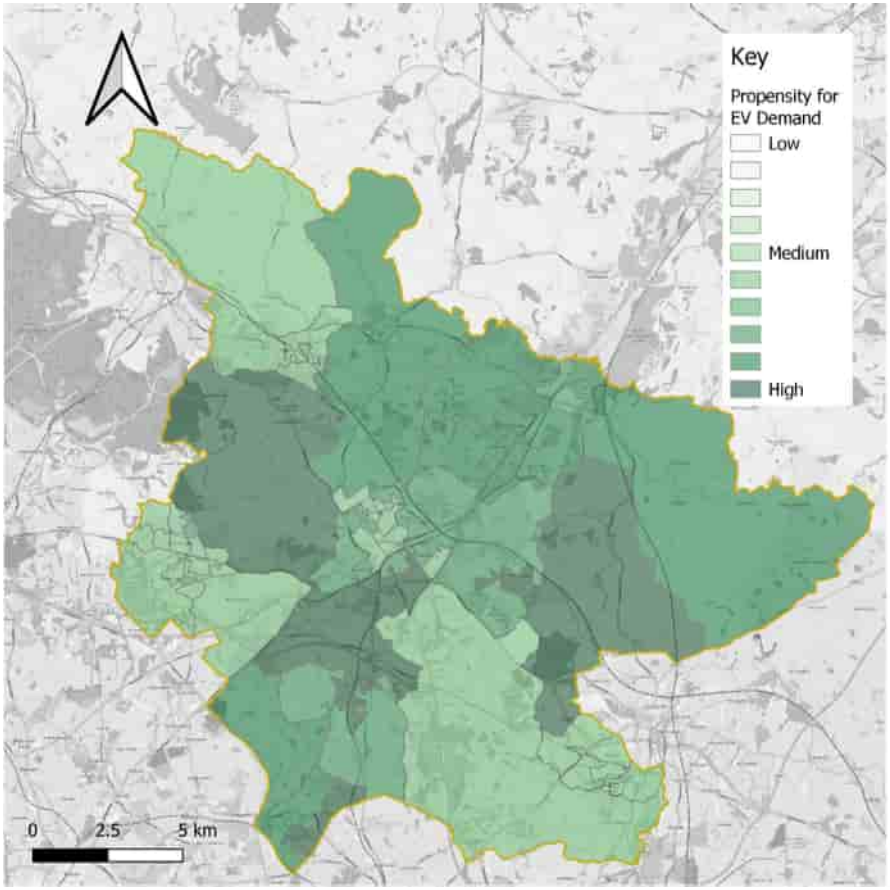


Figure 13: Lichfield Propensity

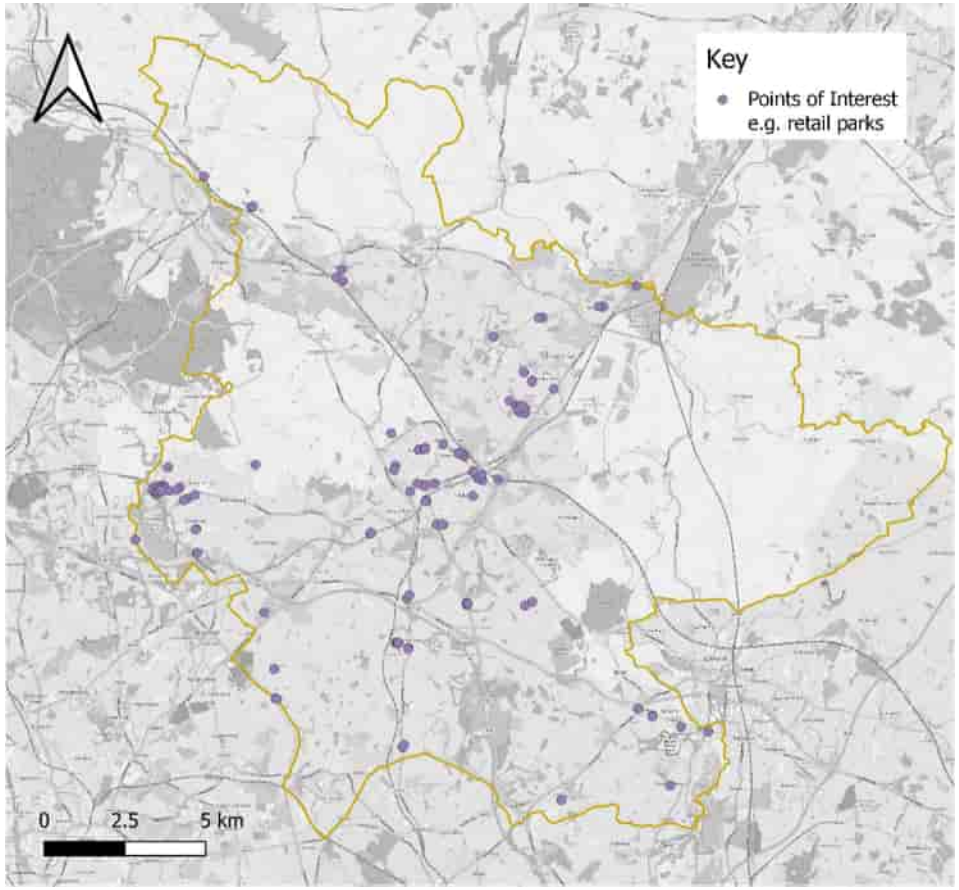


Figure 14: Lichfield Points of Interest

Lichfield – Proposed Locations

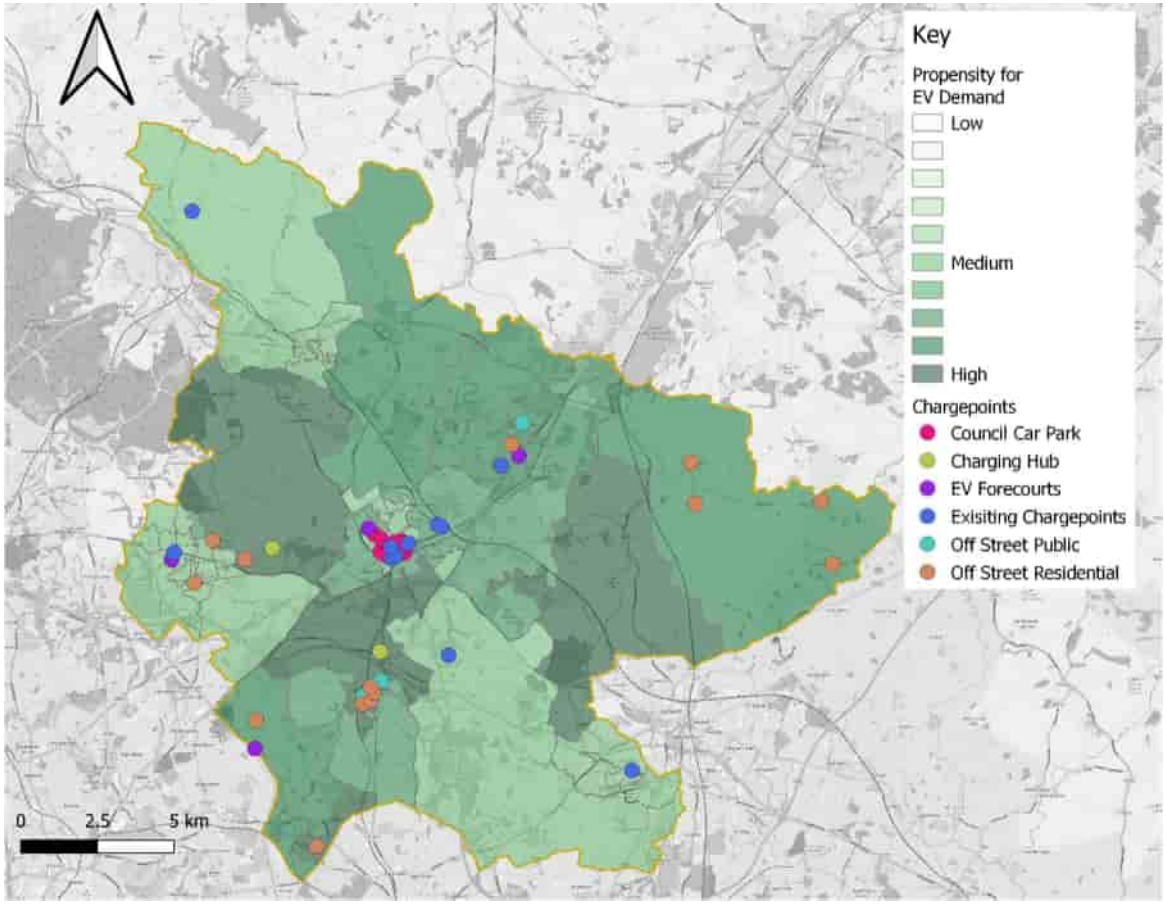


Figure 15: Lichfield - Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the district council to ensure ownership and facilitate EV charging installation	**Action**: The district council should engage residents and support where possible
Council Car Park - Action: Engage with the district council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

Newcastle under Lyme Propensity and Points of Interest

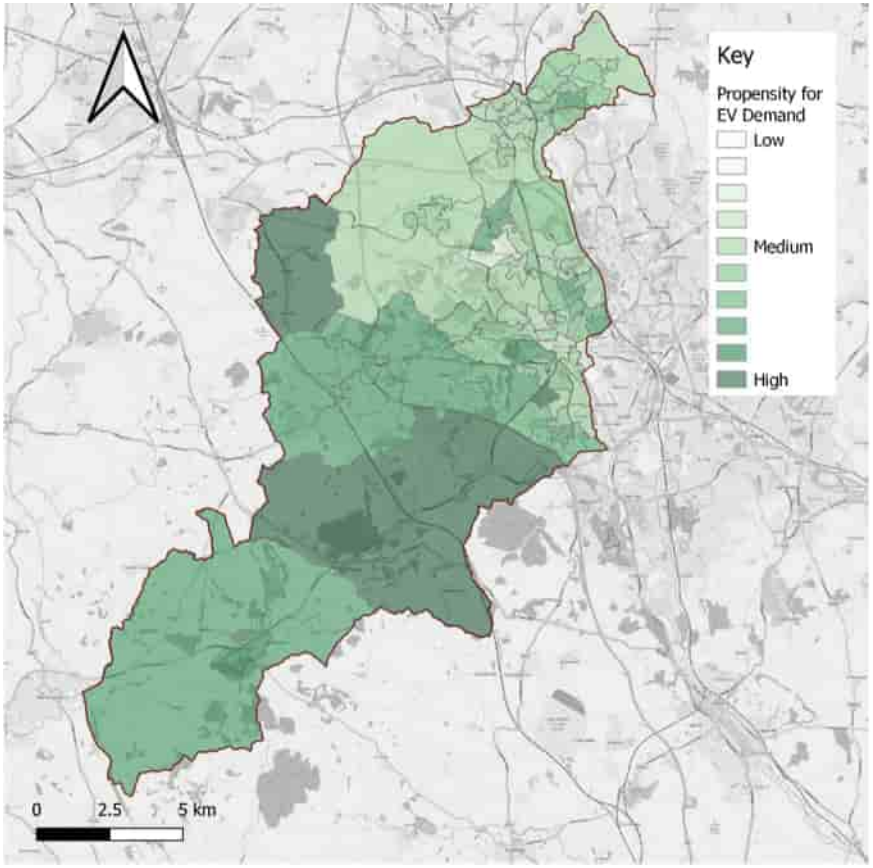


Figure 16: Newcastle under Lyme Propensity

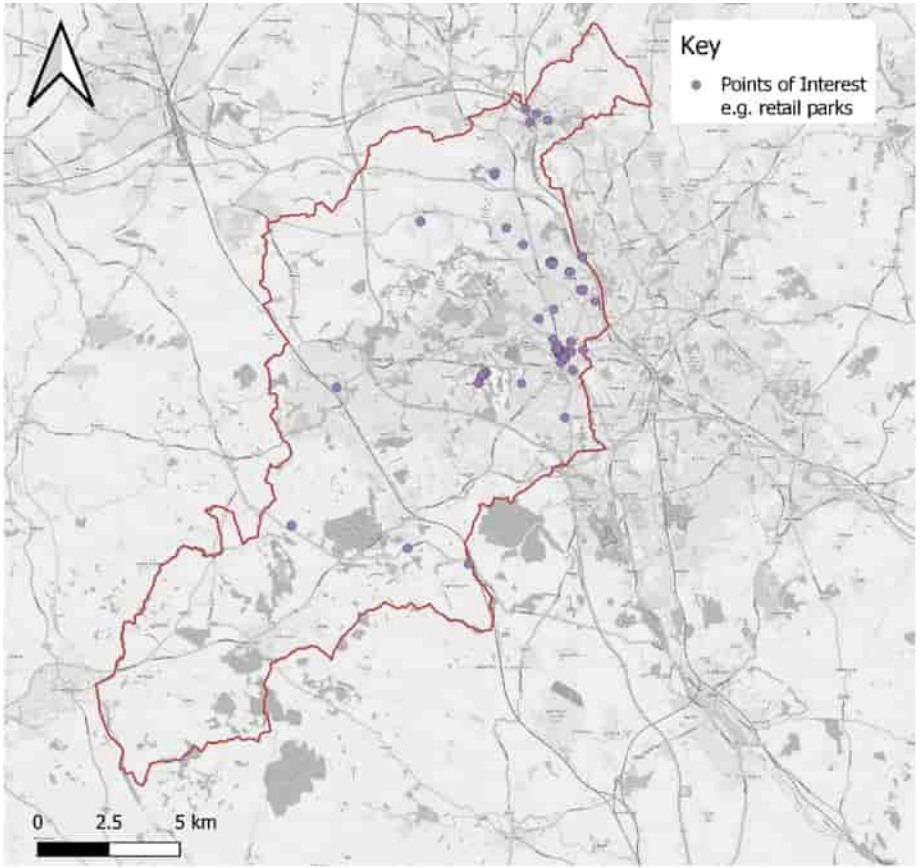


Figure 17: Newcastle under Lyme Points of Interest

Newcastle under Lyme – Proposed Locations

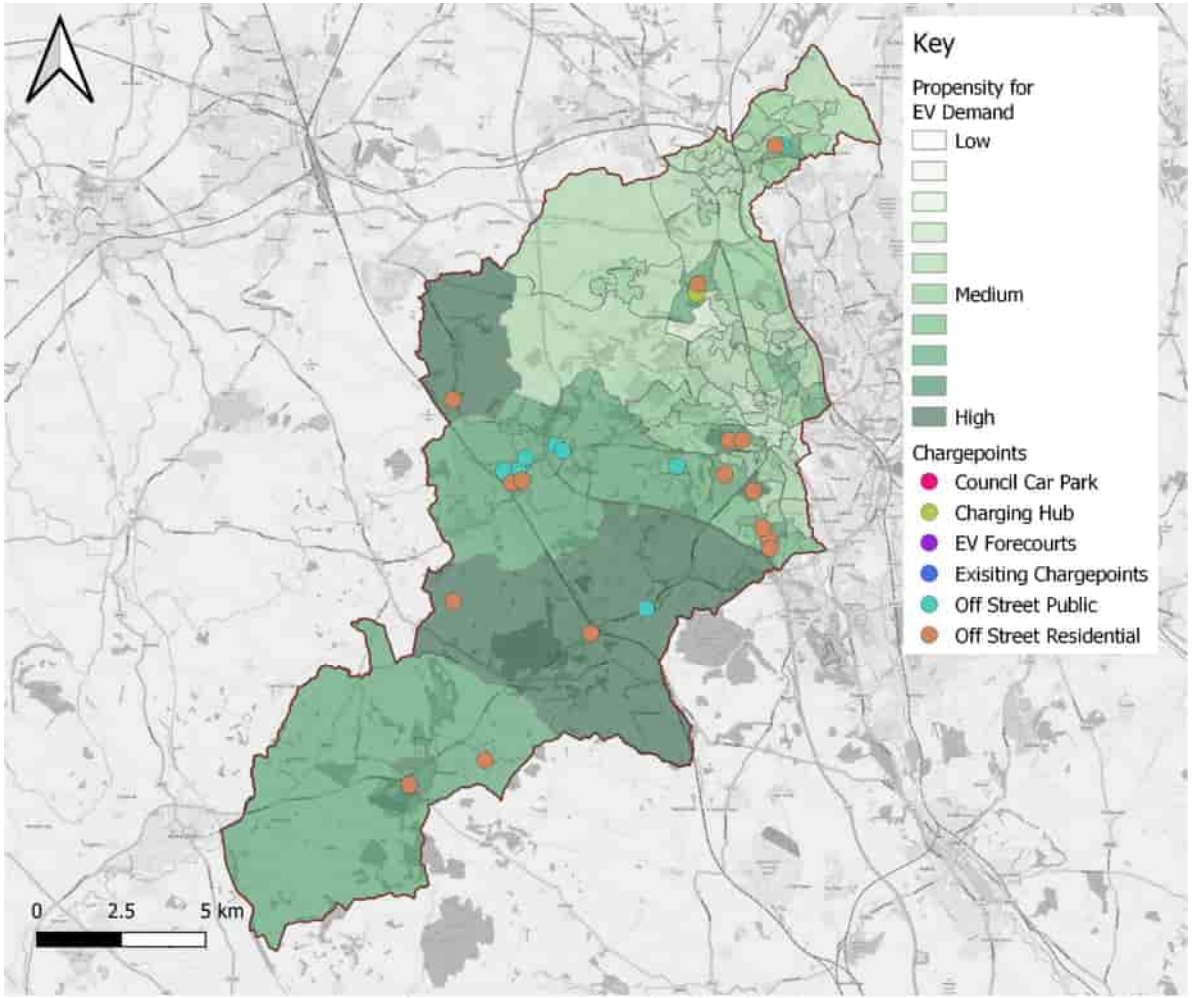


Figure 18: Newcastle under Lyme Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the borough council to ensure ownership and facilitate EV charging installation	**Action**: The borough council should engage residents and support where possible
Council Car Park - Action: Engage with the borough council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

South Staffordshire Propensity and Points of Interest

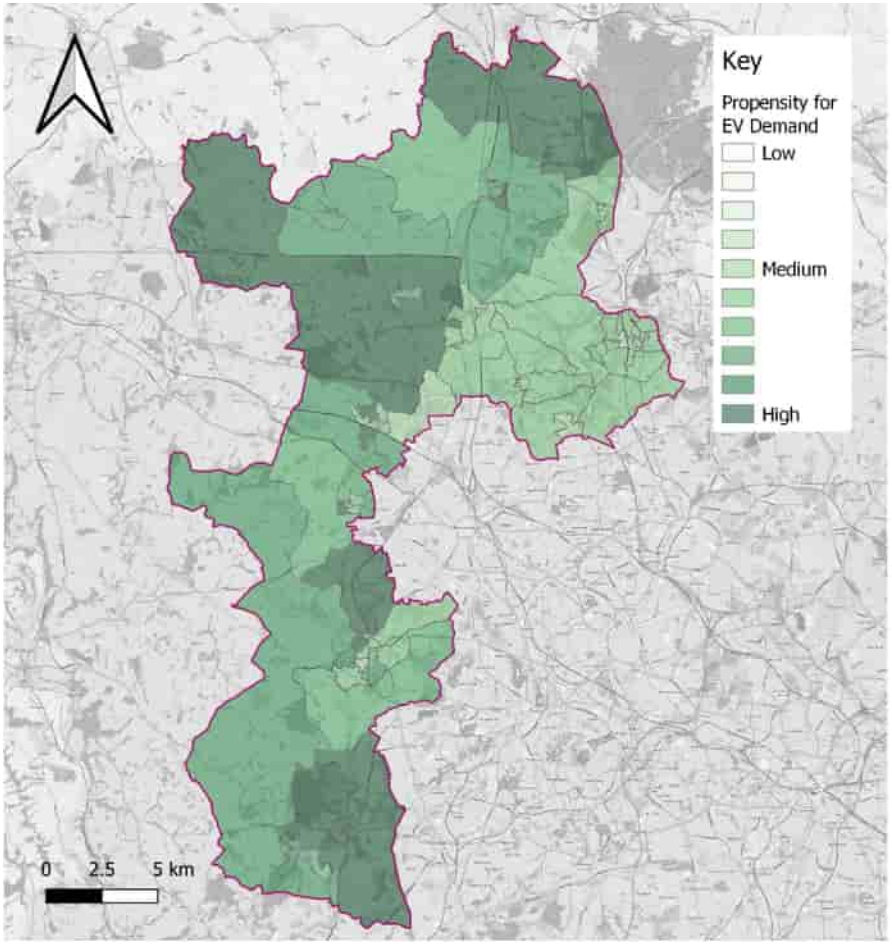


Figure 19: South Staffordshire Propensity

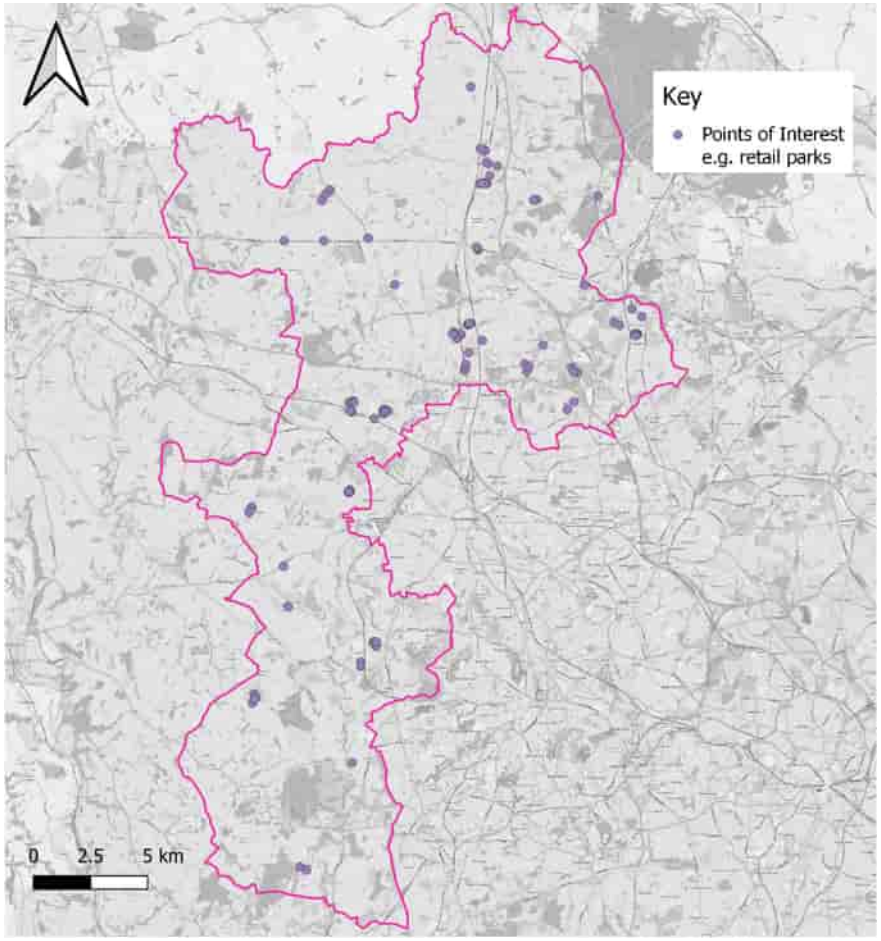


Figure 20: South Staffordshire Points of Interest

South Staffordshire – Proposed Locations

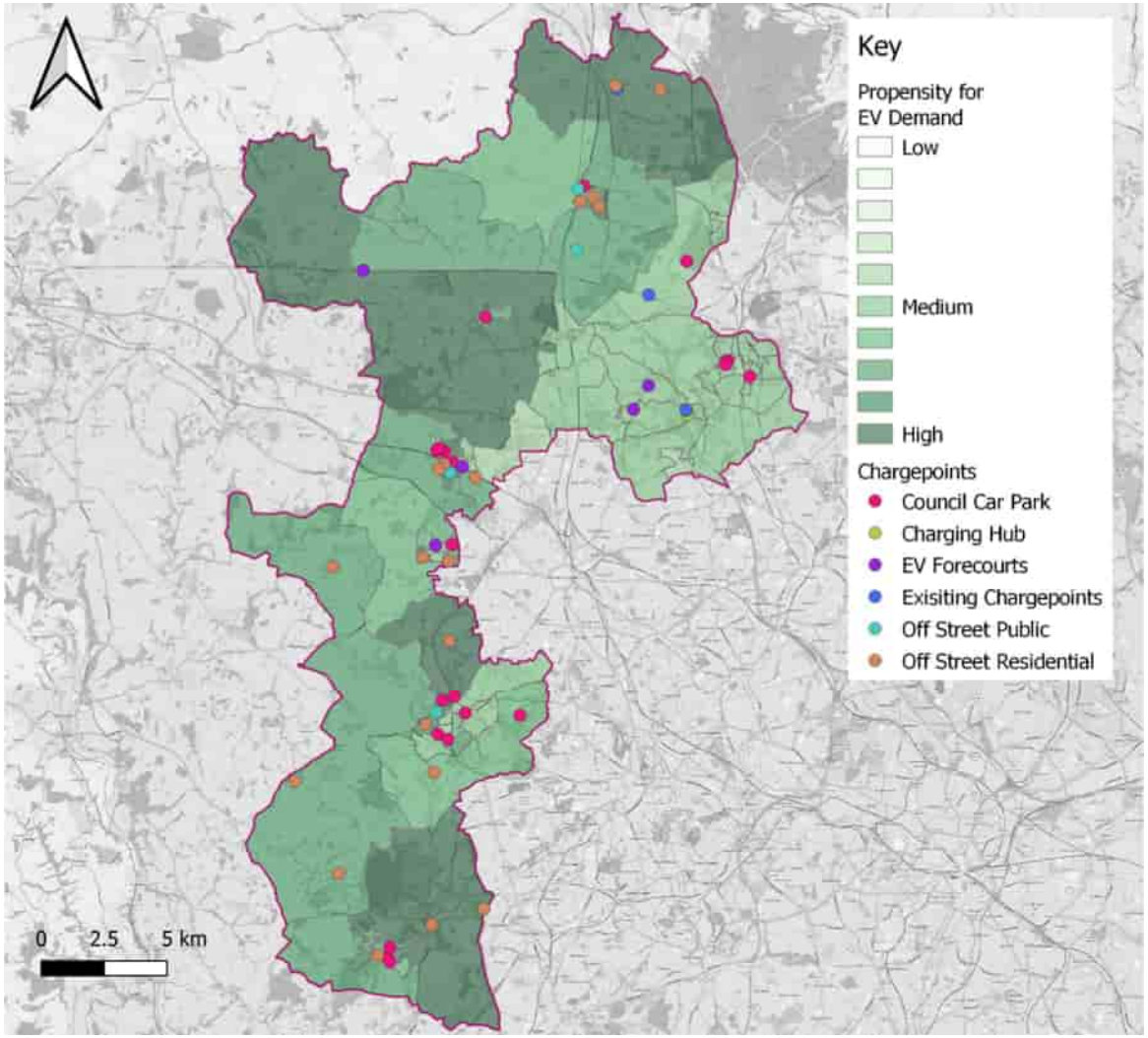


Figure 21: South Staffordshire Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the district council to ensure ownership and facilitate EV charging installation	**Action**: The district council should engage residents and support where possible
Council Car Park - Action: Engage with the district council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

Stafford Propensity and Points of Interest

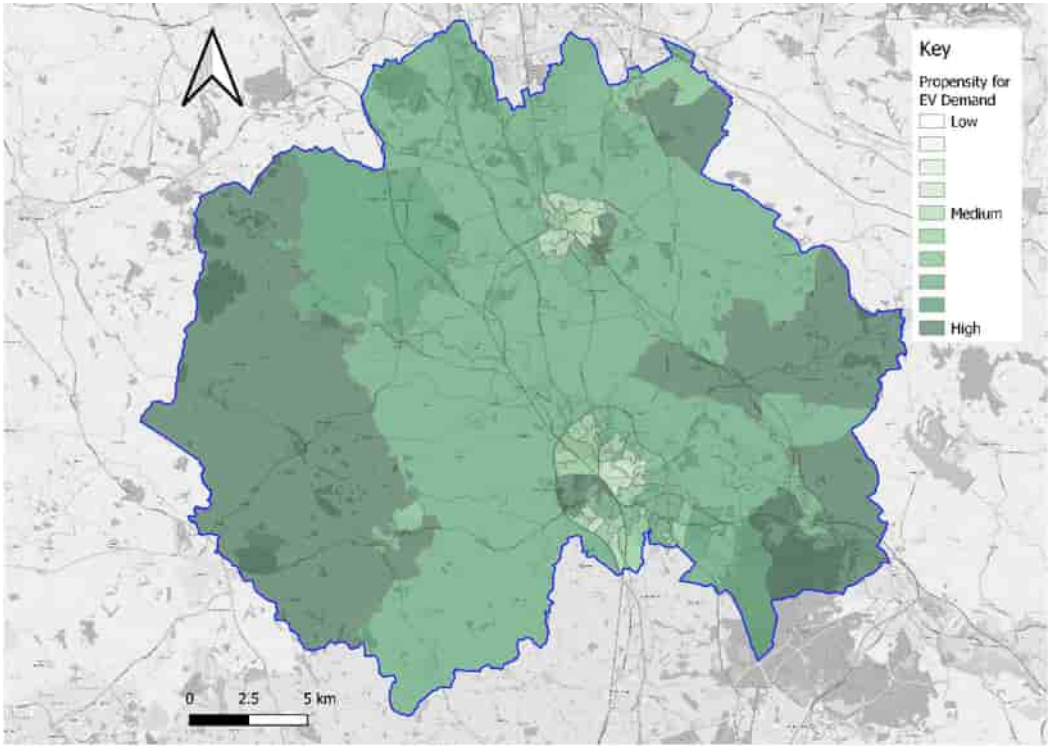


Figure 22: Stafford Propensity

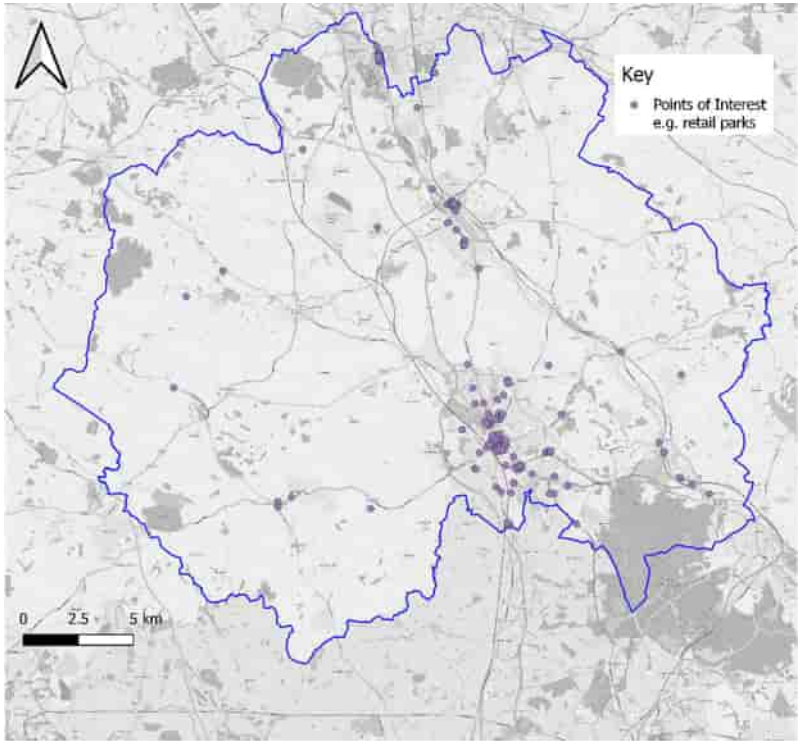


Figure 23: Stafford Points of Interest

Stafford – Proposed Locations

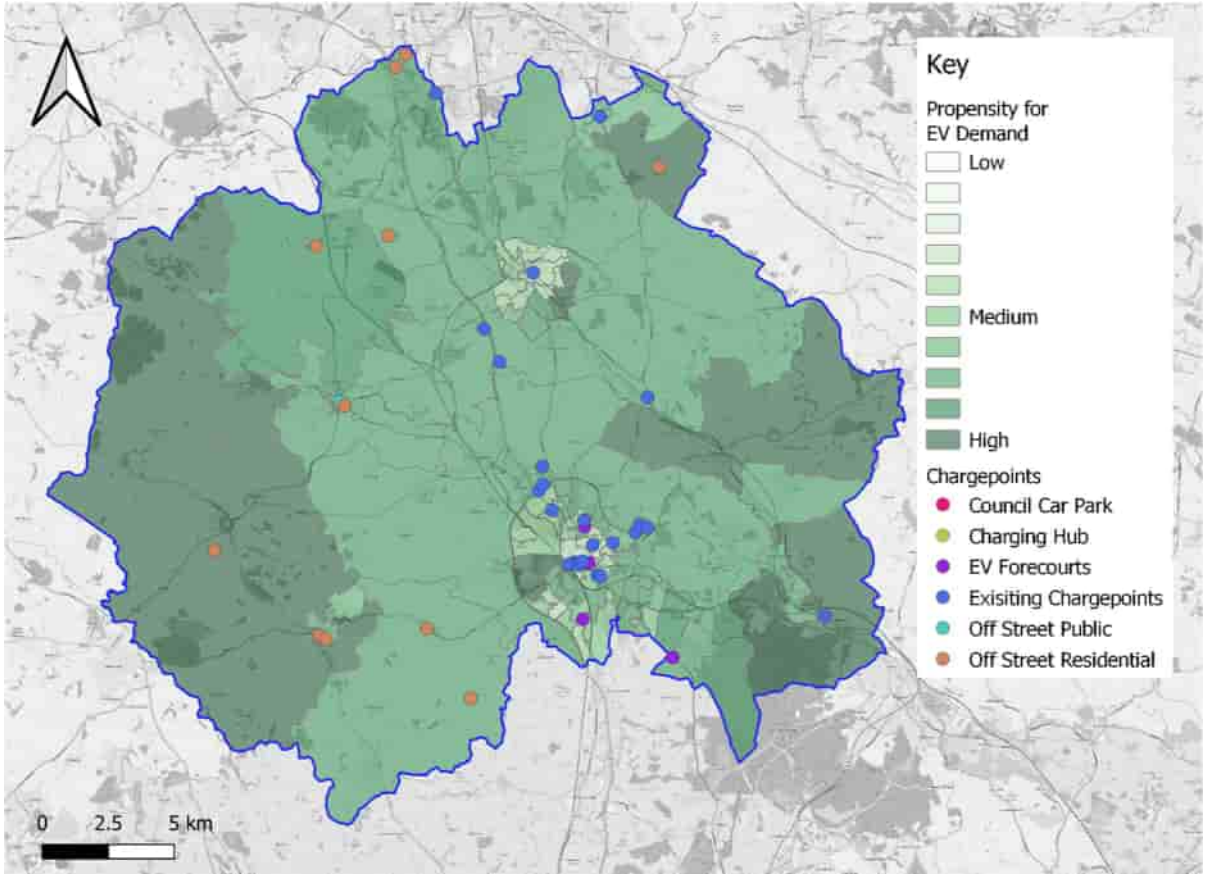


Figure 24: Stafford Proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the borough council to ensure ownership and facilitate EV charging installation	**Action**: the borough council should engage residents and support where possible
Council Car Park - Action: Engage with the borough council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

Staffordshire Moorlands Propensity and Points of Interest

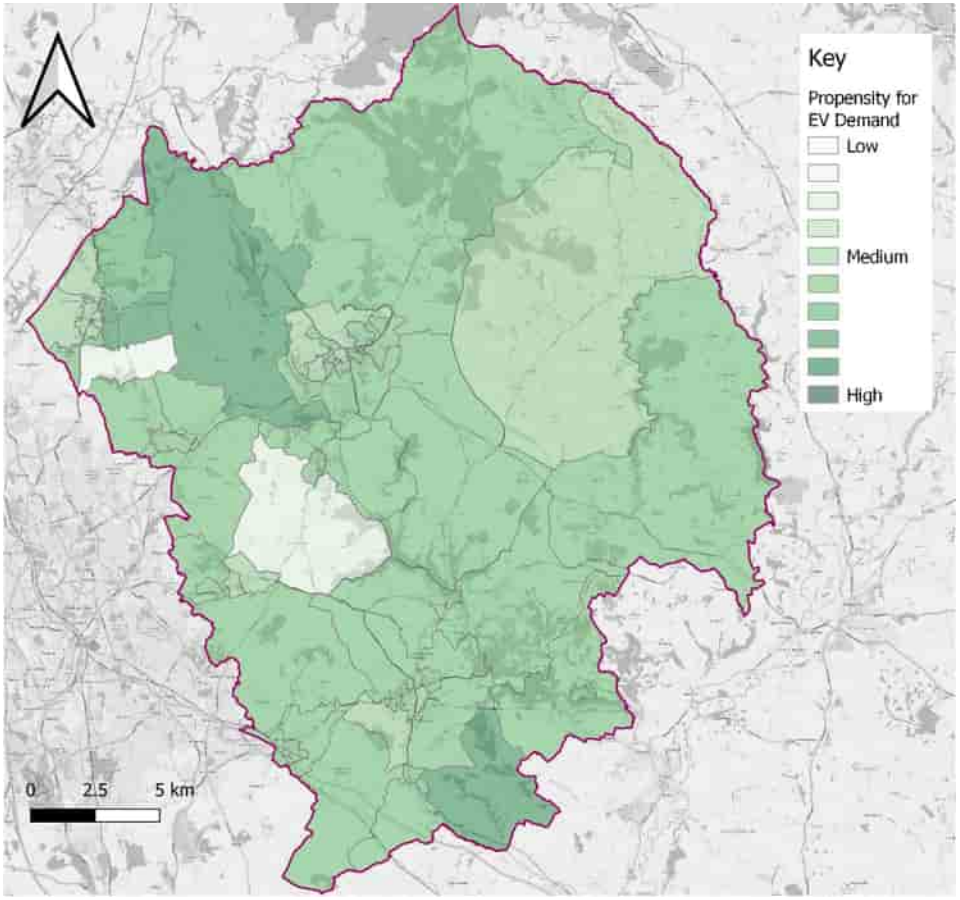


Figure 25: Staffordshire Moorlands Propensity

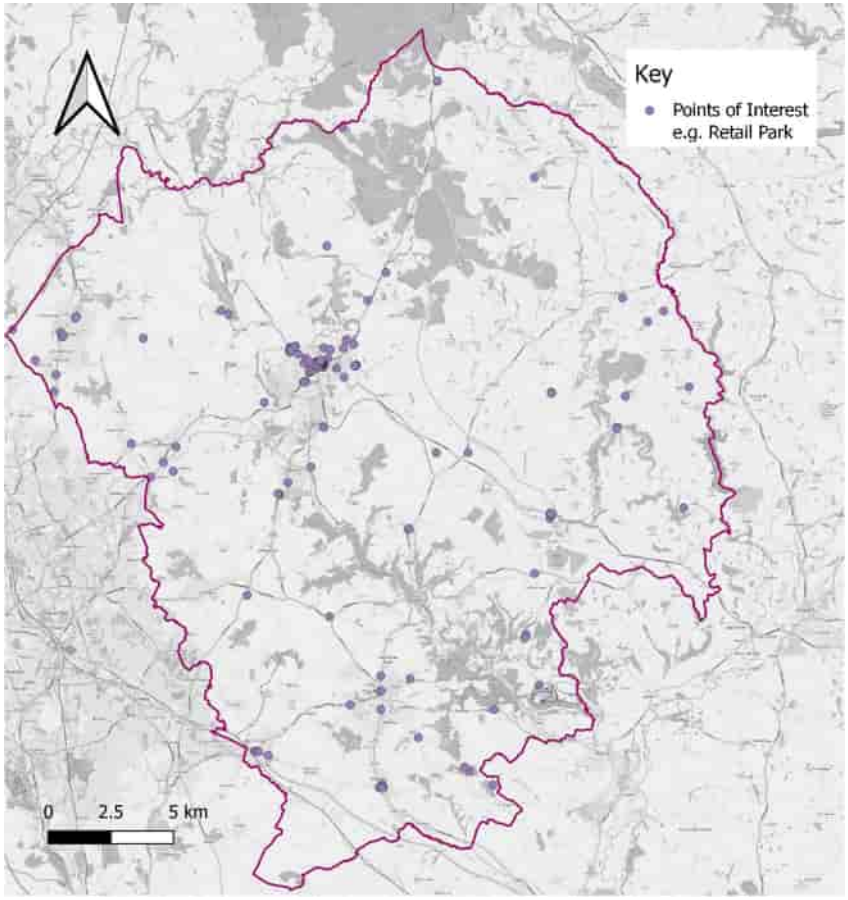


Figure 26: Staffordshire Moorlands Points of Interest

Staffordshire Moorlands – Proposed Locations

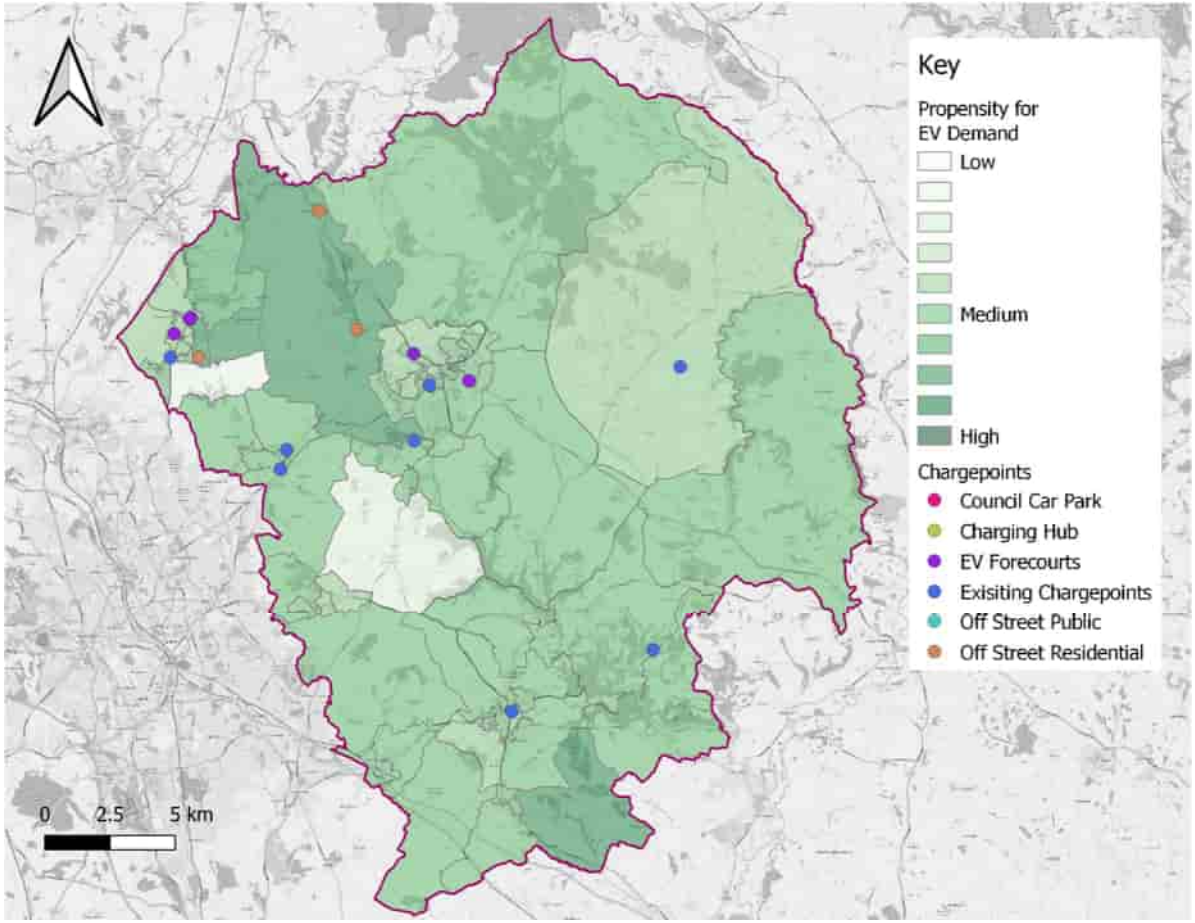


Figure 27: Staffordshire Moorlands – Proposed Locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the district council to ensure ownership and facilitate EV charging infrastructure	**Action**: The district council should engage residents and support where possible
Council Car Park - Action: Engage with the district council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

Tamworth Propensity and Points of Interest

Figure 28: Tamworth Propensity

Figure 29: Tamworth Points of Interest

Tamworth – Proposed Locations

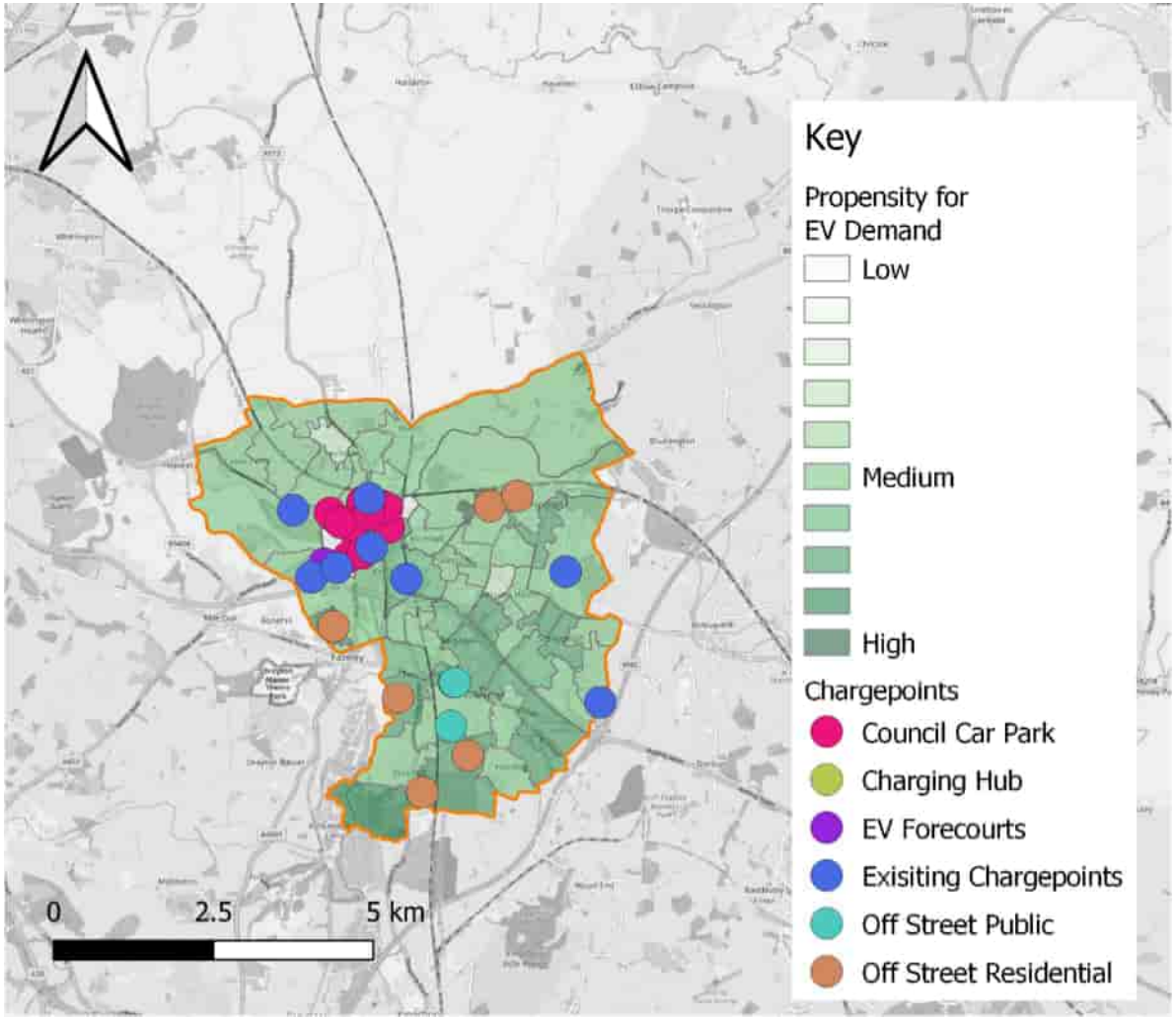


Figure 30: Tamworth - proposed locations

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)
Action: Investigate private operators to build and run an EV charging location / hub	**Action**: Engage with fuel stations to confirm their plans; avoid coordinating EV charging in close proximity	**Action**: Engage with the borough council to ensure ownership and facilitate EV charging installation	**Action**: The borough council should engage residents and support where possible
Council Car Park - Action: Engage with the borough council to ensure ownership and provide support to facilitate EV charging installation.			
For suggested chargepoints: EV charging hubs, off-street public and off-street residential the suggestions are locations within a 1km area.			

5.4. Demand Analysis – Mosaic

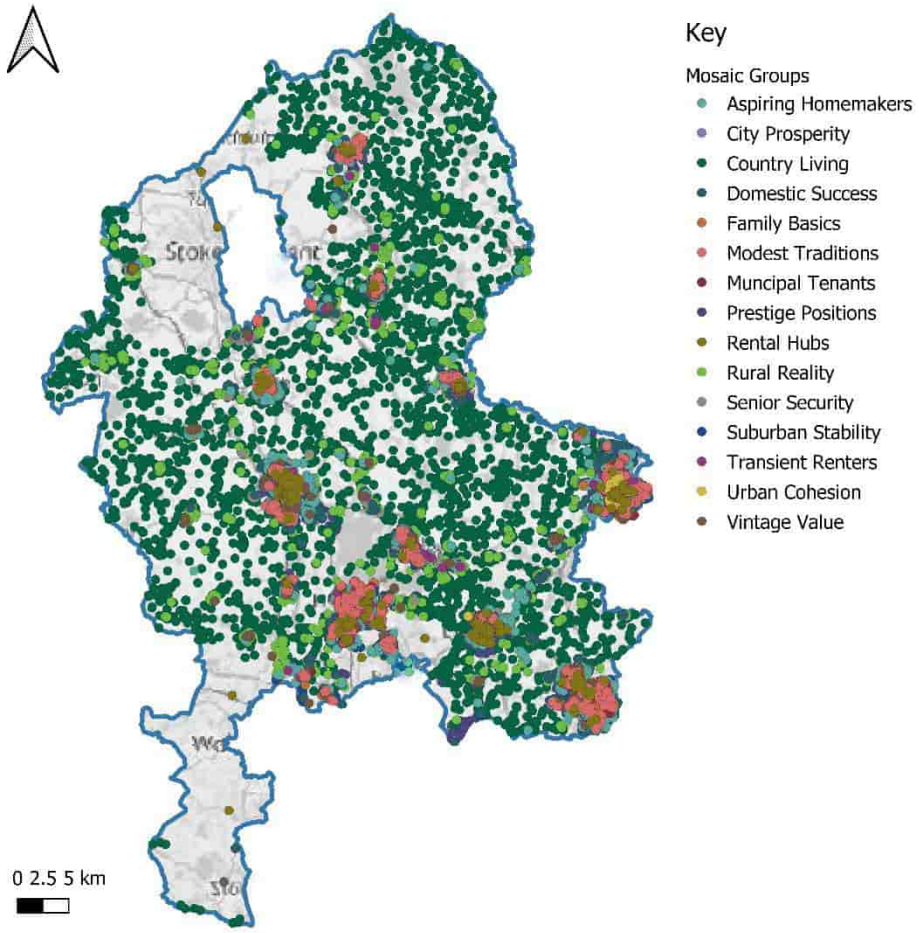


Figure 31: Staffordshire Mosaic data

Mosaic is a geodemographic profiling tool which classifies residential postcodes into one of 15 Groups and 66 Types. It is based on data from Experian, Census (2011), Electoral Roll, Council Tax valuations, house sale prices, self-reported lifestyle surveys, OFCOM data and other consumer information.

All these datasets are aggregated to provide composite personas of the types of adults living in an area and an accurate understanding of the lifestyles and behaviours of households, this enhances the demographic data by helping to understand the likely behaviours of residents.

This information is better viewed and understood through the use of interactive GIS systems along with a full understanding of the category meanings; these maps are included as they help to illustrate the methodologies that can be employed.

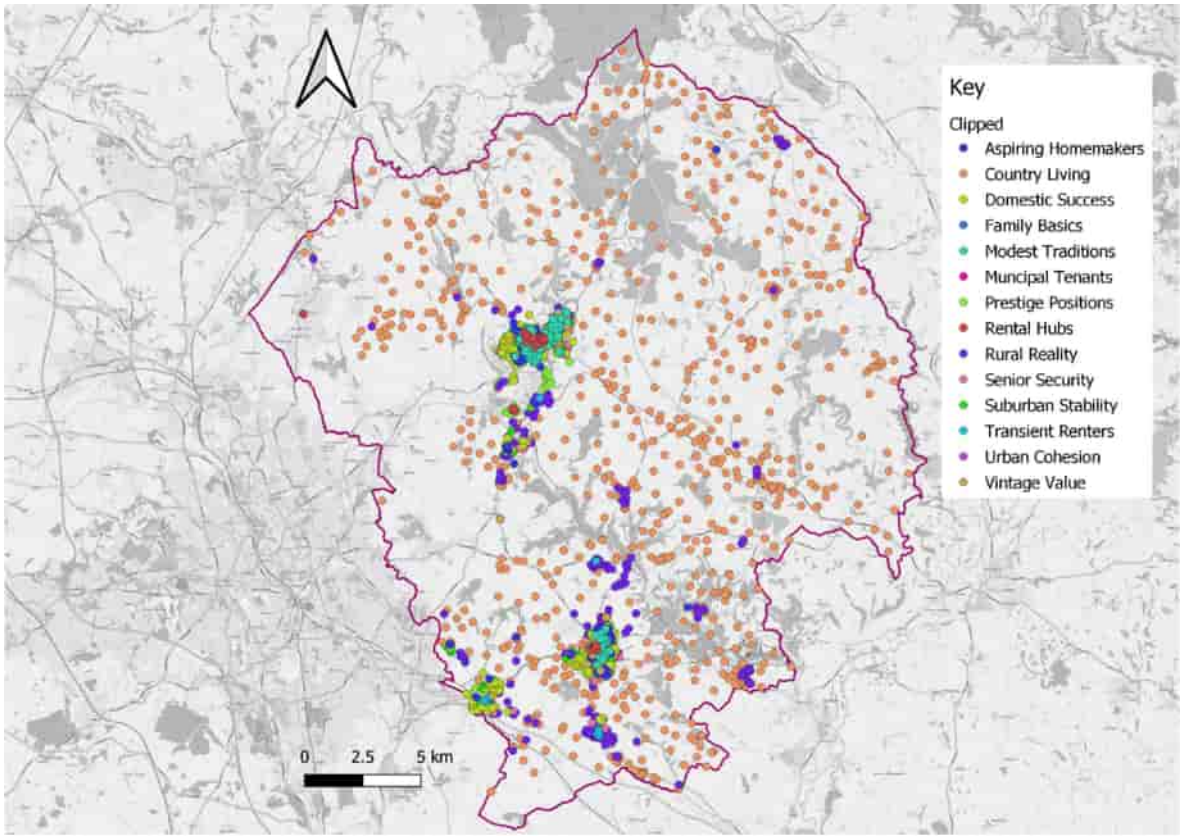


Figure 32: Example of Mosaic data applied to Staffordshire Moorland

Mosaic data and its' interpretation is an example of a deeper level of demand analysis that could be completed by the individual district and borough councils to identify more specific locations and to target campaigns.

5.5. Staffordshire County – Further analysis

From combining all of the datasets – largely represented by the maps above, each of the 'chargepoint services' have specific requirements and meet specific needs within the charging network. The table below outlines each of the primary charging solutions.

Chargepoint service	Typical chargepoint type	Location type	Demand met
EV charging hub	Rapid charging	4 or more chargers in the same location often with the opportunity to add other modes of transport or at transport hubs such as train stations	Depending on scale can support a community uptake in EVs or target high volume traffic routes such as the Strategic Road Network, to support longer EV journeys to or through the area
EV forecourt	Rapid charging	Existing petrol stations	Support the switch to EV while there is still a need for petrol vehicles. Often there are partnerships between oil companies and chargepoint operators for example BP now also provides and operates chargepoints
Residential off-street charging	Slow charging	Private residents with off-street parking	Support private car owners to switch to EV
Off-street charging	Fast / rapid charging	Charging in car parks both private and Council owned	Support destination charging
On-street charging	Fast / rapid charging	Residential areas where there is no or limited access to private driveways	Support private car owners switch to EV

Table I: Charging Solutions for district and borough councils in Staffordshire

The available charging solutions are then analysed as a combined network across the county to ensure charging demand can be met. While the focus of this strategy is EV charging infrastructure, the entire transport network of Staffordshire is considered as it is important that EV charging infrastructure is part of the overall solution.

Consideration should also be made of how chargepoint locations could also link to public transport solutions such as the installation of chargepoints at stations, and how EV charging could support other agendas such as active travel.

5.6. Findings

The key findings from the demand analysis outline that there are opportunities to grow the use of EV in Staffordshire and this should be supported by assisting district and borough councils to develop a consistent charging network for the county. The ambition to achieve net zero by 2050 alongside the decarbonisation objectives will be supported by growing the use of EVs. In addition to the decarbonisation objectives, wider transport objectives were considered such as ensuring accessibility options when installing chargepoints and active travel.

All the provided maps help illustrate the location of current charging solutions and the potential areas to assist and coordinate EV charging solutions for the public. Locations are identified by markers, but it is important to note that the markers do not denote specific locations but approximate areas.

Significant insight into the challenges and potential of the county was seen through the analysis. Over 50% of households within Staffordshire have one or two cars and with 'commute by car' being the most

common transport mode. There is a demonstrable need for endorsing the switch to EV or other modes of transport where possible.

The suggested networks include a large proportion of off-street charging infrastructure solutions, both residential and based in public car parks. Analysing the current likely areas for EV ownership, it has been suggested that a large proportion of these could be best served through off-street residential solutions. Where off-street residential charging wasn't a suitable solution but there was high propensity for EV transition, EV hubs or off-street charging has been suggested. The number and capacity of car parks available also offers potential for planned growth of the charging network, through coordinating the installation of a small number of chargepoints to encourage growth and continuing to increase this as demand grows. To ensure futureproofing, reduce costs, and meet changes in policies - ducting and cabling for further chargepoints can be installed with the installation of the initial chargepoints. By also including larger scale EV charging hubs on key routes for those travelling through or to the county, drivers of EVs would have confidence that there would be chargepoints available. Those who may be residents on the outskirts of the county could even consider switching as the network grows.

The current level of EV ownership and charging infrastructure, depicts low EV ownership and the early stages of a sustainable and effective charging network Overall, this indicates that the suggested network and its current capacity will need to be developed over a relatively short period of time and will need to be continually expanded by the time net zero ambition across Staffordshire are met around 2050. The analysis completed suggests that the focal points of the charging network be off-street residential and off-street charging, for example car parks. From there, EV hubs can be used to enhance the network. The assumption is that the private sector will drive the installation of chargepoints in EV forecourts.

Through the analysis, a suggested EV charging hierarchy has been developed. The hierarchy considers the propensity analysis, solution analysis and the specific solutions suited to the Council. The objective of the hierarchy is to enable SCC and district and borough councils to coordinate solutions best suited for Staffordshire. A review of On Street Charging has been provided in Appendix C.

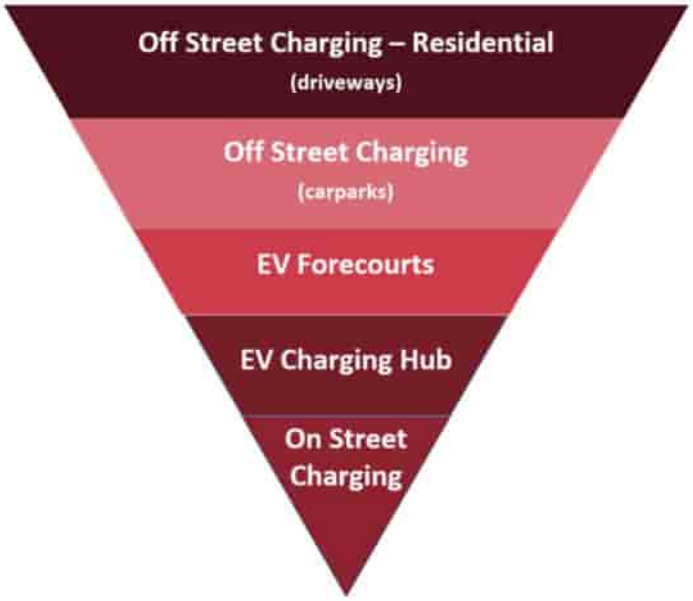


Figure 33: Hierarchy of Charging Options

SCC and district and borough councils should coordinate support and communications in the order displayed, though these priorities will change over the coming years as government initiatives are deployed, the market matures, and public demand patterns change over time. For local reasons the priorities may differ for each of the district and boroughs of Staffordshire.

6. Technology and Market Review

This section of the report forms a review of the existing and emerging EV charging technology, Appendix C contains a review of slow charging, on-street and lamppost charging and how these impact the choices and decisions made across the county.

6.1. Technology Overview

EV charging technology has primarily been driven by private companies focussed on developing and operating the charging infrastructure. With increased demand and market growth, there is increased benefit for these companies to explore faster and more innovative technology. There is a lack of standardised terminology from the speed of charging to the technological requirements to use a charger. For example, fast charging can refer to different kW across charging operators. This means a broad understanding of the underlying technology and requirements is essential for identifying suitable solutions. This has been achieved by establishing a baseline for charging infrastructure in modes, types and solutions.

In addition to the charging technology, consideration has also been given to developments in EV technology. Battery capacity continues to improve and become a key consideration in users purchasing choices. The battery capacity is a consideration in the development of charging infrastructure due how capacity impacts charge time. Furthermore, there are now around 100 EV models on the market. SCC understands that the number of models will continue to grow and will take this into account when facilitating the implementation of a charging network to ensure the widest compatibility.

Charging falls into two categories: Alternating Current (AC) and Direct Current (DC). AC provides alternating current to the vehicle and then technology within the vehicle converts it to DC for charging. Whereas a DC chargepoint converts an alternating current to a direct current within the chargepoint before providing it to the vehicle. While not always the case, DC chargepoints tend to be faster charging, use higher power, and therefore do not fit every solution, and are not compatible with all vehicles.

In addition to the categories of AC and DC charging, there is also tethered and untethered charging. Tethered charging is when the chargepoint has the cable hard-wired to it. Tethered charging is usually found at chargepoints installed at resident properties, and at DC chargepoints. Untethered charging refers to when the cable is not provided at the chargepoint and is usually stored within the vehicle.

While the charging technology itself is critical, is it also key to have an effective charging network integration with communications and management software so that links with back-office systems can be ensured. This will enable chargepoints to receive system updates, meaning compatibility with newer vehicles can be better ensured. Connectivity also allows data capture and monitoring which supports users, operators, and the Council to build insights for EV best practice. This connectivity also links to the access to the chargepoint whether it is free or paid for and gives users remote access.

For the purposes of this review, only options that are relevant within Staffordshire have been considered. Due to the evolving market, key innovations have also been highlighted to ensure the long-term futureproofing of a Staffordshire charging network.

6.2. EV Charging Modes

Alongside AC and DC types, the BS EN 61851-1 standard defines 4 'modes' for charging, effectively defining the chargepoints technology. Modes specify the type of circuit, the socket and therefore the power that can be utilised. It is important to understand that modes impact the speed of charging, and each mode is not necessarily compatible with all cars. As innovations enter the market these definitions and standards will continue to evolve.

Mode 1

Mode 1 covers the charging of an EV by plugging it into a 13amp / three-pin plug socket. This is the mode least recommended for public use as it offers little protection as there is no in-cable control box (ICCB) to provide communication between the outlet and the vehicle ensuring safe charging. Due to the low current this mode is more relevant to electric vehicles such as mopeds, and many newer EVs will not be compatible to charge through Mode 1.

Figure 34: Mode 1 Graphic

Mode 2

Mode 2 covers the use of a 13amp / three-pin plug socket, but the cable importantly incorporates an in-cable control and protective device (ICCPD). The ICCPD will ensure that the charging is set to a specific charging power and provides protection against injury by detecting any imbalance in the currents across the circuits and if detected cuts the power.

Mode 2 is most suitable for EVs that have moderate charging needs, for example PHEVs. It is also an important back-up charging option if there are no dedicated EV chargepoints. It is important to note that Mode 2 is still not a recommended charging option and, like Mode 1, not all EVs are compatible with the mode. Vehicles that are Mode 2 compatible are often supplied with a Mode 2 cable with Mode 3 as an optional extra. Mode 2 usually sees the charge limited to 2.4kw.

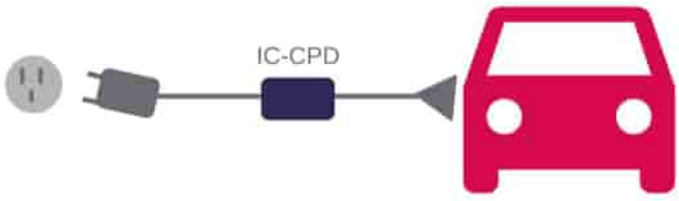


Figure 35: Mode 2 Graphic

Mode 3

Mode 3 uses a separate dedicated circuit and is suitable for residential, public and workplace charging. Mode 3 is provided through a dedicated chargepoint and has communication between the vehicle and the chargepoint. Mode 3 sees a broader range of charge that can be supplied to a vehicle and is the most suitable for charging BEVs. Due to the dedicated chargepoint, a tethered or untethered cable can be used. If tethered, this will usually be suited to the vehicle expected to be charged.

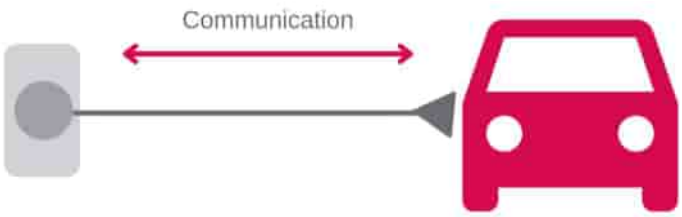


Figure 36: Mode 3 Graphic

Mode 4

Mode 4 is provided through dedicated EV equipment. Rather than providing AC, Mode 4 uses a charger built into the chargepoint to provide DC directly to the vehicle via a tethered cable. Mode 4 chargepoints are commonly in the 20-50kW range and charging in excess of 350kW level may be available in the medium term. This can see an EV charged to 80% in approximately 15 minutes. This approach requires enhanced infrastructure and currently Mode 4 is not available as residential charging.

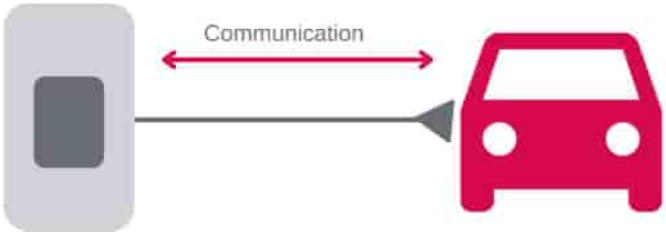


Figure 37: Mode 4 Graphic

6.3. EV Connector Type

As it currently stands, the EV charging market has not agreed to one connector type. There are 4 common types of connectors in the UK although Type 1 is now least common. The connectors impact the mode of charging and the maximum capacity.

The time to charge a vehicle is a key consideration for most users. There are situations when a slower charging period would be acceptable, for example at a residential off-street chargepoint overnight. However, a fast charge would be preferrable at a shopping centre car park. It is therefore key to understand the compatibilities across the modes and type, and their optimum use cases.

Table J: Connector types and charge durations

Charging Speed	Power Output	Typical charging location	Charge Time*	Compatible connection types	
Slow	3 to 7kW	Home, workplace, on-street (lamp column)	16 hours	Type 1	
				Type 2	
Fast	7 to 22kW	On-street, public car park, workplace	2 to 7 hours	Type 1 (max 7kW)	
				Type 2	
Rapid	Up to 50kW	On-street, public car park, forecourt, service station, EV Charging Hub	Up to 1 hour	Type 2	
				Combined Charging System (CCS)	
				CHAdeMO	
Ultra-rapid	120 - 350kW	Forecourt, service station, EV charging hub	Up to 40 minutes	Type 2 (Tesla adapted only)	
				Combined Charging System (CCS)	
				CHAdeMO	
* 0% to 80% of a standard 60kW EV battery					

The table presents the connector types and the charging durations. The speed at which a vehicle can be charged is commonly termed; slow, fast, rapid or ultra-rapid. Across these speeds there are requirements based on mode and type, as well as vehicle compatibility.

6.4. EV Charging Solutions

Within this strategy five EV charging solutions have been identified, providing Staffordshire with the optimum network. The solutions are listed below, these solutions are explained through this document:

- EV hub
- EV forecourt
- Off-street residential charging
- Off-street charging
- On-street charging

These solutions are suitable based on several factors and the locations for these have been identified through the completed demand analysis. However, across each of these locations, multiple types of chargepoint could be implemented to meet requirements. A key factor as to the type of chargepoint recommended in each solution is the speed at which EVs could be charged and the compatibility across vehicle types. In this strategy we have identified three charging speeds: slow, fast and rapid/ultra-rapid. Across each of these speeds we have indicated the solution it best suits and the relevant types of chargepoint have been identified.

There are currently large investments in emerging EV technologies within in the UK. To ensure that Staffordshire charging infrastructure is futureproofed, key innovations have also been highlighted.

Slow Charging

The definition of a slow charging solution is a charge of 3kW – 7kW and either Mode 2 or Mode 3. Slow charging is often suited to off-street residential solutions, as in these cases vehicles can be charged overnight, and this aligns with the Department for Transport recommendations of charging overnight.

The decision to use the slower types of charging mechanisms is closely linked to the problem you are trying to resolve. The situation as it exists across Staffordshire has been considered in detail and is described in Appendix C.

Fast Charging

The definition of a fast charging is a charge of 7kW-22kW and modes 2, 3, CHAdeMO or Combined Charging System. Often when installing fast chargepoints, power supply upgrades can be required to ensure the required electrical infrastructure. Fast charging can be delivered through a variety of chargepoints, kerbside units, dedicated parking bays or residential charging units.

Fast charging can suit a variety of situation and use cases. Fast charging can support the top-up of EVs while visiting points of interest such as supermarkets, retail parks or tourist locations. In addition, fast charging can be used in off-street residential solutions and can be helpful in multiple EV households.

The benefit of the speed of fast charging is key and as EVs continue to develop more vehicles will be able to charge at the highest rate.

Rapid/Ultra rapid

The definition of rapid/ultra-rapid charging is a charge of 50kW or more and Modes 3, 4, CHAdeMO or Combined Charging System. Like fast charging installations, the electricity supply and capacity need to be examined before installation. This is critical if many rapid/ultra-rapid chargepoints are installed in one location. Across the UK rapid/ultra-rapid chargepoints are the smallest proportion of chargers. Currently off-street and on-street residential solutions cannot facilitate rapid/ultra-rapid charging and it is more commonly found at forecourts, charging hubs or at commercial locations.

Ultra-rapid charging is still relatively new technology and therefore is not compatible with all EVs. Rapid/ultra-rapid charging is provided through locations with dedicated parking bays. This charging offers a similar benefit as fast charging but providing a larger battery charge in a shorter period of time; especially at locations such as service stations, supermarkets or retail parks. Rapid/ultra-rapid charging can also be beneficial for EV users on longer distance journeys.

Electric Charging Hub

Electric charging hubs offer an opportunity to provide large scale publicly accessible charging. This is beneficial in the move to EVs in supporting the removal of charge anxiety on longer journeys and ensuring short charges provide enhanced benefit to EV users.

In addition to the scale of charging available at a hub the space can also provide other benefits such as community spaces, retail or food.

An example of a charging hub within the UK is Braintree near Essex with space for 36 vehicles to charge and the utilisation of solar and renewable energies.

Figure 38: GRIDVOLT charging hub

Innovation

Technology within the EV charging market is continually developing and endeavouring to meet user demands for convenience and speed while providing viable solutions.

Wireless charging, which is now commonplace for smart phone charging, and other at-home technology is now being explored for EV charging. The technology used is a similar form of inductive charging with the electrical charge passing through an air gap from one magnetic coil to the other. This could provide charging through charging bays with a stationary vehicle, while some companies are also exploring the possibility of charging while driving. This technology is not at implementation stage although there are several trials across the UK for example in Nottingham and Milton Keynes. This charging would be beneficial to not only private EVs but buses, taxis or commercial vehicles.

Figure 39: Wireless in road charging

Another area of innovation is vehicle to vehicle (V2V) and vehicle to grid (V2G) charging and integration. This is possible when a charger includes the technology to allow current to flow bidirectionally. The benefit of vehicle to grid integration is that depending on the demands on the grid, power can flow either to or from the vehicle. This would allow EVs to support the grid during peak times. The benefits of vehicle-to-vehicle charging are similar in that EVs could support other EVs when charging is required. With this we are seeing that the development of EV charging infrastructure could be used to support wider infrastructure challenges.

There is substantial work developing around the use of solar energy and battery storage that will allow the harvesting of renewables such as daylight and wind power to supplement the grid and allow energy to be fed back into the grid, companies such as myenergi [4] have commercial solutions for home energy management.

7. Commercial Models

When considering the installation of a charging network, several commercial models will often provide the best fit for both the charging solution across the county and for the individual districts and boroughs. If a range of charging infrastructure solutions are installed, this may lead to several commercial models being utilised.

Off-street residential charging can be considered separately, as this would not require council support, but instead would require investment from the intended user with two key costs. Firstly, an installation cost, which can be offset by applying for funding support such as OZEV's Electric Vehicle Homecharge Scheme. Secondly, there would then be the on-going electricity cost, and many electricity providers are now offering tariffs to cater for EV charging.

For off-street, on-street, EV charging hubs, and EV forecourts there are a variety of models that could be seen across Staffordshire to allow users to access the chargepoint. Authorities may choose to own and operate the chargepoints themselves and set the cost for charging a vehicle. There are examples where authorities choose to make chargepoints and/or parking free to EV users. Other models bring operators in to manage and install the chargepoints.

When considering the models utilised across Staffordshire, each authority will need to consider:

- Cost to the user
- Cost to the authority
- Customer service implications
- Marketing capability and requirements
- Capability and responsibility of installation
- Capability and responsibility to maintain chargepoints
- Ongoing support and management of EV charging systems and suppliers
- Ongoing support and management of infrastructure

7.1. Model Assessment

There are five key commercial models to be considered for public EV charging solutions across Staffordshire, excluding off-street residential. The table below outlines the key points of the different models and what should be considered in each case.

Model	Description	Key Considerations
Own and Operate	▪ Local Authority (LA) tenders for a Chargepoint Operator to install chargepoints ▪ LA own the Chargepoints (gov. funding) ▪ LA takes revenue ▪ LA pays CPO to maintain Chargepoints.	▪ This model would involve LAs appointing suppliers to deliver and manage the chargepoint infrastructure for a set period with all revenue being retained.
Match Funding	▪ The OZEV grant offers up to 60% of the funding for eligible costs. ▪ The remaining 40% will need to be provided by the LA or a third party i.e. CPO. ▪ This could also be achieved if government funding is not available, but the LA and the operator agree to match funding.	▪ Likely to reduce the revenue received and limiting the overall control the LA can exert on the facility.
Concession Framework	▪ The operational costs and risks are shared in part or completely with the operator. ▪ This model is often a revenue share.	▪ The LAs safeguard their resources and revenue but then must accept diminished input in determining facility locations. ▪ This approach is best suited where demand is proven, or operators are confident of a return on investment.
Land Rental	▪ Private sector investment, installing, maintaining the chargepoints while paying rent to the LA (or other) for land	▪ Revenue for the LAs would solely be from the land rental which would reduce some risks. However, operators would look to ensure demand.
Leasing/Hosting	▪ Chargepoints leased to the LA for a monthly fee	▪ Provides control of location to the LAs and maintenance to the operator. ▪ LAs would not receive any revenue and would need to decide if monthly fees would be covered by cost to users.

Table K: Commercial Model Overview

It is likely that across Staffordshire, several of these commercial models could be utilised, depending on the type of infrastructure installed. The advantages and disadvantages of each model are outlined below.

Model	Advantages	Disadvantages
Own and Operate	▪ All revenue is retained by the LA ▪ Locations selected by the LA ▪ Streamline procurement ▪ UK Government has established procurement frameworks to expedite process and encourage supplier confidence	▪ Funding would need to be identified ▪ On-going maintenance costs ▪ Updates to technology are the LA's responsibility ▪ Any key performance indicators and or contractual service level agreements may be difficult to enforce
Match Funding	▪ Partner ownership incentivises better provision, improved quality of service for users ▪ Reduced risk and responsibility for maintenance costs ▪ The chargepoints can be futureproofed depending on the partnership agreement	▪ Reduced revenue share ▪ Contractual and financial arrangements may not suit all suppliers and so pool of available partners is reduced. ▪ Partners require confidence that revenue will be achieved in any locations
Concession Framework	▪ Reduced risk and responsibility for maintenance costs ▪ The chargepoints can be futureproofed depending on the partnership agreement ▪ Depending on the agreement the council may retain ownership of the chargepoints or electrical connections	▪ Operators require confidence that revenue will be achieved and therefore locations would need to be agreed ▪ Delivery can be slowed due to negotiations and the time to make a contractual award ▪ Reduced revenue share
Land Rental	▪ Reduced risk and responsibility for maintenance costs ▪ Agreed revenue through rent	▪ Operators require confidence that revenue will be achieved and therefore locations would need to be agreed ▪ Delivery can be slowed due to negotiations
Leasing/Hosting	▪ Reduced risk and responsibility for maintenance costs ▪ The chargepoints can be futureproofed depending on the leasing agreement ▪ Locations selected by the councils	▪ No revenue share ▪ Delivery can be slowed due to negotiations and the time to make a contractual award ▪ Expected that the monthly cost would need to be covered by charges to users

Table L: Model assessment

7.2. Promoting charging infrastructure

There are a variety of methods to promote the creation of an EV charging network that does not require each council to lead on installation or location identification. This could include:

- Workplace charging points
- Trial implementations
- Development & planning considerations
- Vehicle trials

Workplace charging points

This could involve coordinating the deployment of charging facilities at workspaces for employees to utilise. This can be achieved by creating a framework through which standardised new charging infrastructure can be deployed for use at workplaces. Agreements in terms of the adoption, long-term maintenance etc. and the initial cost can be built into contracts between the operator and landowner in this instance the workplace. This can help provide the best rate to chargepoint users if there is a cost to charge.

For workplaces there are national schemes, such as the Workplace Charging Scheme which could be engaged with. Workplace chargepoints support local authorities to roll-out charging infrastructure across the county. In addition, many workplaces now have sustainability targets internally and by encouraging the uptake of EVs with their staff and visitors, these targets can be met.

Trial implementations

This would see the local authorities engage with chargepoint operators to trial the technology for a set amount of time. This is usually implemented in the case of innovations within the charging market, for example through a trial of pop-up chargers. The benefits are threefold as the local authority can test the demand for charging infrastructure, operators are able to trial new technology or back-office innovations and users are given access to new chargepoints. Depending on the trial agreement, installed equipment could be kept after the trial.

Development & Planning considerations

Planning policies and developments across the county offer an opportunity to grow the charging network. Section 106 agreements (between councils and a developer) should include provision for EV charging infrastructure and, assuming this is to be included within the wider adoption, a standard can be mandated. With the introduction of National Model Design Code guidance will be provided on how policies and design can be best utilised in the decarbonisation of transport. In addition, there are building regulations that should be implemented including requirements for EV charging infrastructure.

Vehicle trials

Through engagement with various suppliers, it is possible to facilitate the trial of an electric vehicle (private hire vehicles, vans and eCargo cycles) as a way to actively engage organisations to consider adoption of EV technology.

8. Recommendations & Next Steps

8.1. Engagement

Through developing this strategy document, SCC acknowledges the importance of engaging with district, borough and parish councils to facilitate a consistent and effective EV charging solution for the people of Staffordshire and its visitors.

It is important to bring both district and borough councils and the residents along with Staffordshire County Council on this journey to coordinate a solution for the benefit of all; the development and delivery of an engagement programme will be key. To support the work of the district and borough councils, an EV Toolkit [See Appendix B] has been developed. The EV Toolkit has been developed and delivered for SCC, and further explains the charging options and answers key questions for district and borough councils to use, to help inform and support.

Alongside this, each district and borough council have been provided with an EV Charging Action Plan that identifies most steps required to deploy and manage EV charging solutions [see Appendix A].

Through developing an improved understanding of current and future vehicles along with the associated infrastructure, district, borough, and parish councils will aim to provide residents with the confidence to switch and thereby increase the speed at which net zero is reached.

Parish councils have a strong connection with their local communities and can be instrumental in raising the local perception of EV charging. They should be encouraged to support initiatives such as car share schemes and installing charge points at local community buildings for the benefit of their local residents.

It is also expected that chargepoint operators operating across the county will engage with local users, taking onboard feedback and ensuring that the solutions meet demand and expectations. Each district and borough council should ensure that all engagement considers feedback received from users. It is expected that all operators engaged by the district and borough councils will have a Service Level Agreement that ensures the fit for purpose nature of their offering.

Each district and borough council will also be engaging external stakeholders such as developers, businesses, and landowners to support installation on their land and promote the new charge-point network where relevant.

Recommendation 8.1: Local authorities should review this EV Charging Strategy and ensure feedback they receive from chargepoint users and stakeholders at key delivery points is included in further plans and actions.

8.2. Procurement

There are several potential procurement routes available to each of the councils. To utilise the most effective procurement route, each council will need to engage with relevant stakeholders such as their procurement teams and Councillors, to agree the preferred approach. In addition, a review of any existing models utilised by the councils will need to be undertaken along with an in-depth review of the potential operational and commercial models to ensure that the procurement process will support the agreed objectives.

Recommendation 8.2: Local authorities should engage with their procurement teams to assess the appropriate avenues for procurement, taking into account the operating and commercial models that are optimal for each local authority. Continued assessment of appropriate and relevant funding for the councils to install chargepoints will support their residents in making the transition to EVs.

8.3. Locations and Feasibility

The demand analysis has identified suitable locations based on relative levels of demand and a high-level infrastructure analysis. Before any chargepoint solution is installed, a detailed feasibility of the proposed areas for EV charging sites is required. This would confirm location and solution suitability by completing:

- Site visits
- Electrical feasibility study
- Civils' feasibility study
- Detailed analysis of the users in the area
- Detailed assessment of installation cost
- Adhering to standardised installation processes (The IET Code of Practice for Electric Vehicle Charging Equipment Installation and Accessible Charging BSI PAS 1899:2022)

Accessibility will also be a consideration in all locations and chargepoint solutions. This should focus on ensuring that all users can, and also feel enabled, to utilise the facilities. For example, those who may have disabilities may have specific concerns or needs with regards to the type of charge-point installed, the amount and availability of pavement space or the implications of trailing cables. The accessibility review should also evaluate the local area with regards to lighting, general safety, CCTV and crime and disorder prevention alongside other general requirements being met.

Recommendation 8.3.1: Local authorities should ensure a feasibility study is undertaken that follows good practice with well-developed processes and procedures for installing any chargepoints that will be publicly accessible.

Recommendation 8.3.2: Staffordshire County Council will continue to engage with all district and borough councils to provide a consistent approach to EV rollout across Staffordshire.

8.4. Funding

As part of the strategy, a high-level funding review has been completed. In implementing the strategy, SCC will co-ordinate with district and borough councils to develop joint bids and gain access to relevant funding from UK Government, the Department for Transport and Office for Zero Emission Vehicles. This will allow each district and borough council to deploy funding to support the widest distribution of charge-point solutions. In addition to this form of funding, district and borough councils should also explore the commercial partnership opportunities which may be applicable with a particular focus on EV charging hubs.

District and borough councils should also help ensure that the residents of Staffordshire are kept up to date on funding that is available to them as private car owners for EV purchasing and chargepoint installation.

Recommendation 8.4: SCC should co-ordinate joint bids to maximise opportunities and each district and borough council should aim to support residents in staying up to date with relevant funding information.

8.5. Operators

Each district and borough council should ensure that operators in their area meet expectations in both the technology provided and through using Key Performance Indicators (KPI's). As with any type of service provision users' rights should be protected - Ofgem continues to ensure these rights and protections meet with new chargepoint services. Access to charging can be confusing with different operators using many different methods. The supplied EV Charging Toolkit should provide users with a clear source of information.

Recommendation 8.5: District and borough councils should engage as a group with private chargepoint operators to ensure they follow best practice and encourage charging solutions at locations tailored to the requirements of each area, for the benefit of as many citizens as possible.

8.6. Monitoring

Monitoring the chargepoint network should be a key responsibility of each district and borough council and their appointed operators. Monitoring will allow each council to understand usage and track demand which will then feed into enhancements to chargepoints or expanding the network. As the use of EVs and chargepoints grows, each council should aim to monitor the impact on air quality and emissions.

Recommendation 8.6: Each district and borough council should ensure a monitoring system is in place to review the impact of their EV charging strategy and feed this back to the public where relevant. When new data is available, the analysis should be updated. The developed EV Charging Action Plan should be adopted by each council and implemented against a common timeframe.

9. Conclusion

This Public EV Charging Strategy outlines a methodology to help district and borough councils meet the anticipated growth in demand. This is based on current data, predictions, and the impact of upcoming policies. Through coordinating development of the charging infrastructure networks across the county; SCC can support the local authorities in the creation of a sustainable charging network for the benefit of residents and visitors to the county; all of which will produce positive steps towards reaching net zero.

SCC has been clear in their objectives for decarbonisation and their commitment to supporting local authorities and residents in producing modal shift. The Public EV Charging Infrastructure Strategy considers not just existing EV users but potential users. It examines the transport network across Staffordshire and aims to facilitate modal shift to a more sustainable travel network for the future.

As EV use grows, this data led approach can be further updated and adapted to recognise where further charging demand and infrastructure is required. As policies continue to be implemented both UK wide and across Staffordshire, the implementation of this charging infrastructure strategy will ensure each of the district and borough councils are prepared to meet policy changes and the challenges ahead.

SCC's position should continue to be supporting the district and borough councils with information, consistent approaches, developing bids and broad support; whilst promoting options and funding choices for the public. Implementing all these steps will enable the successful growth of EV chargepoint installations across the county.

10. References

[1] UK Electric Vehicle Infrastructure Strategy (GOV.UK) Accessed 13/06/2022

[2] EV Chargepoint Grant guidance for customers - GOV.UK (www.gov.uk) Accessed 08/08/2022

[3] Midlands Connect | Supercharging the Midlands Accessed 10/05/2022

[4] Renewable energy products made in Great Britain | myenergi Accessed 13/06/2022

[5] How many charge points are there in the UK 2022 - Zap-Map Accessed 13/06/2022

[6] Government announces tenfold expansion in charge points by 2030 - zap-map Accessed 13/06/2022

[7] MC - STP Doc_Digital (midlandsconnect.uk) Accessed 13/06/2022

[8] The future of rural mobility report final (midlandsconnect.uk) [pdf] Accessed 08/08/2022

Appendix A: EV Charging Action Plan

To support district and borough councils in their EV charging infrastructure journey, an action plan has been produced. This document sets out all the steps required and allows the capability to track and manage each EV charging project.

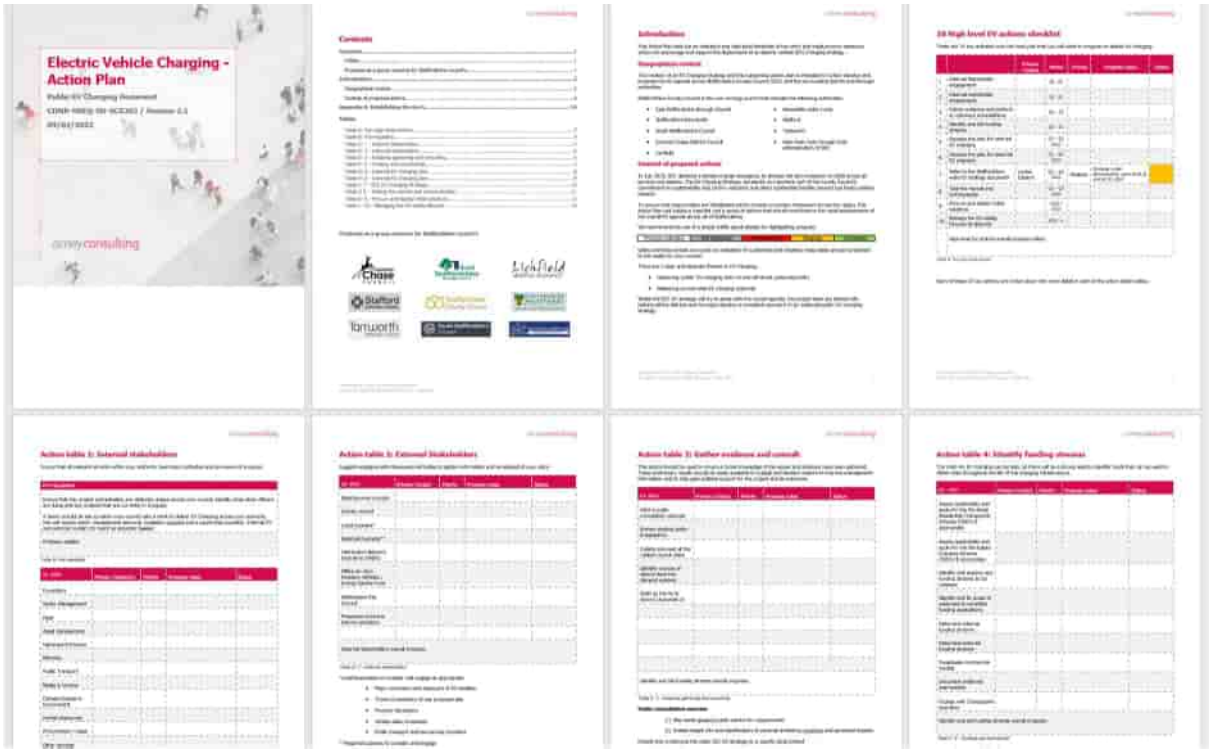
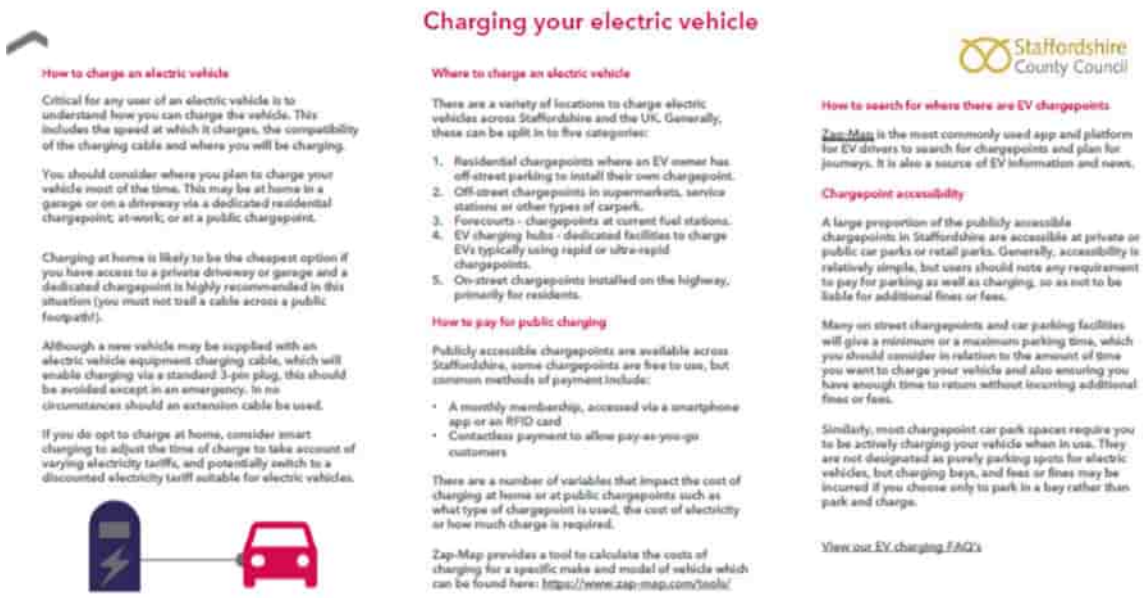


Figure 40: Electric Vehicle charging plans

Appendix B: EV Charging Public toolkit

A toolkit has been provided for SCC that sets out key information that the public will want to know when it comes to owning and running an EV. This will be published on the county council's website as a resource for all to use.



How to charge an electric vehicle

Critical for any user of an electric vehicle is to understand how you can charge the vehicle. This includes the speed at which it charges, the compatibility of the charging cable and where you will be charging.

You should consider where you plan to charge your vehicle most of the time. This may be at home in a garage or on a driveway via a dedicated residential chargepoint; at-work; or at a public chargepoint.

Charging at home is likely to be the cheapest option if you have access to a private driveway or garage and a dedicated chargepoint is highly recommended in this situation (you must not trail a cable across a public footpath!).

Although a new vehicle may be supplied with an electric vehicle equipment charging cable, which will enable charging via a standard 3-pin plug, this should be avoided except in an emergency. In no circumstances should an extension cable be used.

If you do opt to charge at home, consider smart charging to adjust the time of charge to take account of varying electricity tariffs, and potentially switch to a discounted electricity tariff suitable for electric vehicles.

Charging your electric vehicle

Where to charge an electric vehicle

There are a variety of locations to charge electric vehicles across Staffordshire and the UK. Generally, these can be split in to five categories:

1. Residential chargepoints where an EV owner has off-street parking to install their own chargepoint.
2. Off-street chargepoints in supermarkets, service stations or other types of carpark.
3. Forecourts - chargepoints at current fuel stations.
4. EV charging hubs - dedicated facilities to charge EVs typically using rapid or ultra-rapid chargepoints.
5. On-street chargepoints installed on the highway, primarily for residents.

How to pay for public charging

Publicly accessible chargepoints are available across Staffordshire, some chargepoints are free to use, but common methods of payment include:

- A monthly membership, accessed via a smartphone app or an RFID card
- Contactless payment to allow pay-as-you-go customers

There are a number of variables that impact the cost of charging at home or at public chargepoints such as what type of chargepoint is used, the cost of electricity or how much charge is required.

Zap-Map provides a tool to calculate the costs of charging for a specific make and model of vehicle which can be found here: https://www.zap-map.com/tools/

Staffordshire County Council

How to search for where there are EV chargepoints

Zap-Map is the most commonly used app and platform for EV drivers to search for chargepoints and plan for journeys. It is also a source of EV information and news.

Chargepoint accessibility

A large proportion of the publicly accessible chargepoints in Staffordshire are accessible at private or public car parks or retail parks. Generally, accessibility is relatively simple, but users should note any requirement to pay for parking as well as charging, so as not to be liable for additional fines or fees.

Many on street chargepoints and car parking facilities will give a minimum or a maximum parking time, which you should consider in relation to the amount of time you want to charge your vehicle and also ensuring you have enough time to return without incurring additional fines or fees.

Similarly, most chargepoint car park spaces require you to be actively charging your vehicle when in use. They are not designated as purely parking spots for electric vehicles, but charging bays, and fees or fines may be incurred if you choose only to park in a bay rather than park and charge.

View our EV charging FAQ's

Figure 41: EV Charging - public toolkit

Appendix C: Slow Charging Review

The definition of a slow charging solution is a charge of 3kW –7kW and either Mode 2 or Mode 3. The benefit of a slow charging solution is that it is unlikely to require enhancements to the electrical infrastructure to which it is connected.

Slow charging is best suited to off-street residential solutions, as in these cases vehicles can be charged overnight, and this aligns with the Department for Transport (DfT) recommendations of charging overnight. This type of solution would also be suitable of PHEVs which do not require a continuously available chargepoint.

Though Elexon regulatory approval is required, lamp column chargepoints use the adaptation of traditional lighting columns to provide charging. However, the cabling for streetlights can generally only support charging of between 3 – 5 kW. Lamp post charging relies on the lighting column being next to the road so that charging cables don't stretch across footways causing an obstruction. In common with many local authorities, and in line with best practice, Staffordshire County Council has undertaken a programme to move lighting columns to the back of the footway. This reduces street clutter and therefore improves visibility for drivers whilst making more space on footways for pedestrians, wheelchairs, buggies and those living with sight loss. The authority is very mindful that we need to ensure that our pavements are safe for all pedestrians (particularly those with visibility impairments) and other highway users, and that we don't expose the County Council or individuals to excessive liability or risk and therefore does not permit trailing cables across a footway.

Despite the relatively low level of power delivered by each unit, the cumulative impact means that generally only a small number of lamp posts can support charging on any one street which means that this solution isn't scalable.

Pop-up chargepoints fit within the category of charging infrastructure known as kerbside units. The key difference in this innovation is that the charging unit retracts into the kerb. This supports the removal of street clutter and street space can then be utilised by other users and support those who have accessibility concerns.

However, in an on-street location, it is recommended that each chargepoint installed needs to have a dedicated EV charging bay with it. This effectively provides a protected private parking space for the resident who has requested the chargepoint (if there are initially no other plug-in owners on the street). To bring in parking restrictions requires a residents' parking permit scheme which requires the support of a proportion of residents on the street.

Additionally, it would be unreasonable to require a resident to continue using a plug-in vehicle. With leasing now the dominant form of new car 'ownership' it is increasingly common for car users to swap vehicles after 12, 24 or 36 months. This means that whilst a resident may have a plug-in vehicle when they request a chargepoint, they are not required to keep doing so. This issue also applies to ownership/tenancy at the address, which again could not reasonably be conditioned. Whilst in theory any established bays could be used by a new owner/tenant of the property or new EV owners on the street, in practice additional EV owners are more likely to request a facility outside of their property and given current plug-in vehicle rates it is highly unlikely that any new owner/tenant will have a

qualifying vehicle. This would then mean that they wouldn't be able to park in front of their property even if the bay was unused.

In both the above cases scalability is an issue. This means that whilst the first few requests on a road may be met, subsequent requests could not. This is not equitable and doesn't deliver our goal of supporting EV take up at scale. A 7-kW charger is a meaningful additional electrical load. It is equivalent to half the total import capacity of a house with a 60-amp fuse and about one third of the import capacity for a house with a 100-amp fuse. From a technical point of view, if additional capacity is needed in a street, it can be provided. However, the cost of this varies significantly from street to street depending upon the existing electrical supply. In some cases, no upgrades will be required. In streets where upgrades are needed, the costs can vary from tens of thousands of pounds to hundreds of thousands of pounds, sometimes in adjoining streets. This creates a postcode lottery which would lead to some residents having requests rejected whilst neighbours may have requests accepted. Through the recommendation that on street facilities require a dedicated parking bay, this effectively creates a protected private parking space for one resident.

These solutions either require high user tariffs (and therefore are not equivalent to home charging options) or will require ongoing revenue support from the Council to cover the cost of operation and maintenance. As a core principle of the public network is that user tariffs should support day to day costs, we would have to implement a high tariff. This would make the on-street solution less attractive for users and mean that they are more likely to seek out cheaper charging alternatives which would lead to underuse of chargepoints and a shortfall in revenue. It would be unreasonable to require residents to commit to using an on-street charger they have requested on an ongoing basis. This leads to a high likelihood of stranded assets, ongoing financial liabilities with no income, and unused spaces which is likely to cause ongoing issues for residents. Providing dedicated private car parking spaces does not support the governments' long-term goal of reducing the need for private car ownership dependency and encouraging active modes of travel. This is particularly important in areas where there are existing issues with lack of space for car parking, limited footway space and congestion.

Public chargepoints can support multiple vehicles, this is particularly true for Rapid and Ultra-Rapid chargers but also applies to Fast chargers. On street residential chargers will generally support one vehicle. A ratio of one charger to one vehicle is resource inefficient and as such does not support Climate Change and Sustainability objectives, it will also hold back the uptake of EVs as one for one charger deployment will take far longer and cost far more than public facilities.

A socially equitable public charging network is needed to provide affordable alternatives to home charging to ensure that those without access to off-street parking are not disadvantaged. Failure to provide alternatives could delay the transition to EVs for many Staffordshire residents. For residents without the ability to charge EVs off-street a number of alternative options to home charging will be important in enabling a transition to EV use.

Workplace charging during the day will also be an important option. In locations with poor public transport accessibility and where employees are dependent on car travel; we will engage with both public and private sector employers to encourage them to make use of the Government Workplace Charging Grant to establish and expand a workplace EV charging offer as part of a wider review of workplace car parking requirements for employees. We will engage with large public sector employers such as hospitals, schools and colleges and medical centres with workplace car parking to determine

EV charging infrastructure requirements. Retail and leisure destination car parks with dwell times of an hour or more also offer an opportunity to provide alternative EV charging options. Working with district and borough councils, together we will investigate opportunities to expand the charging network in local authority owned car parks in town and district centres and at other local authority assets such as car parking at leisure centres, gyms, libraries, community and health centres and recreation / sports facilities.

We will engage and work with private EV charging infrastructure providers and operators to coordinate them to install chargepoints off-street in retail and leisure destinations and community charging hubs in residential areas could also provide an alternative option in some locations. Where there are residential areas with significant on-street car parking we will investigate opportunities to facilitate off-street community charging hubs on a case-by-case basis where appropriate locations can be found and look at options that will enable residents to use these facilities for overnight charging where possible. These community charging hubs could potentially include charging bays for EV Car Club vehicles as well as other mobility services such as cycle hire or e-bike hire facilities, offering residents alternatives to private car ownership.

Appendix D: National Policies

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
National Policies							
Reducing emissions from road transport: Road to Zero Strategy - GOV.UK (www.gov.uk)	The Government's long-term strategy to transition to zero emission road transport	2018	• New street lighting columns to include charging points. • Highway Infrastructure Code of Practice and the Network Management of Traffic Equipment Code of Practice – that highway authorities refer to as part of the management and maintenance of their assets – to include a section on the benefits of introducing EV lamppost chargepoints.	• A cohesive, integrated, and affordable net zero public transport network, designed for the needs of the passenger, will empower consumers to make sustainable end-to-end journeys and enable inclusive mobility. • Clean Air Zone cities should continue to be used as a tool to achieve net zero.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• On-street Residential Chargepoint Scheme (ORCS) for local authorities • EV Charging Infrastructure Investment Fund • Tax and grant support increasing EV uptake • EVHS grant	Medium - 2 - 5 years
Automated and Electric Vehicles Act 2018	Regulation of consumer experience of charging infrastructure, including requirements and prohibitions	2018	• Regulations may impose requirements on operators of public charging or refuelling points in connection with— (a)the method of payment or other way by which access to the use of public charging or refuelling points may be obtained; (b)performance, maintenance and availability of public charging or refuelling points; (c)the components of public charging or refuelling points that provide the means by which vehicles connect to chargepoints.	• The information considered likely to be useful to consumers and users or potential users of the chargepoint, for example information about— (a) the location of the chargepoint and its operating hours, (b) available charging or refuelling options, (c) the cost of obtaining access to the use of the chargepoint, (d)the method of payment or other way by which access to the use of the point may be obtained, (e)means of connection to the point, (f) whether the point is in working order, and (g) whether the point is in use.	• Off-street • On-street • EV Forecourts • EV Charging Hubs		Short - under two years

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
				• Building regulations may require operators to— (a) provide a prescribed method of payment or verification for obtaining access to the use of public charging or refuelling points; (b) co-operate with each other for the purposes of a requirement imposed by the regulations (for example, by sharing facilities or information); (c) take prescribed steps for the purposes of such a requirement (for example, to provide information to a prescribed person).			
EV Charging in Residential and Non-Residential Buildings	The Government proposal on charging requirements for residential and non-residential buildings	2019	• Every residential building undergoing major renovation with more than 10 car parking spaces to have cable routes for electric vehicle chargepoints in every car parking space. • Every new non-residential building and every non-residential building undergoing a major renovation with more than 10 car parking spaces to have one chargepoint and cable routes for an electric vehicle chargepoint for one in five spaces. • A requirement of at least one chargepoint in existing non-residential buildings with more than 20 spaces, applicable from 2025.	• Within Building Regulations, the government will apply a requirement for cable routes to be installed in all residential buildings with more than 10 parking spaces undergoing major renovation, with some exemptions. • The Government will lay down requirements for the installation of a minimum number of chargepoints in all existing non-residential buildings with more than 20 parking spaces. This requirement must be set by March 2020 and will come into force by 1st Jan 2025.	• Off-street • On-street	• OZEV	Short - under two years

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
Future of mobility: urban strategy - GOV.UK (www.gov.uk)	Outlining the benefits, the Government wants to see from mobility innovation.	2019	• New modes of transport and new mobility services must be safe and secure by design. • Mass transit must remain fundamental to an efficient transport system.	•The marketplace for mobility must be open to stimulate innovation and give the best deal to consumers. • The commercial benefits of innovation in mobility must be available to all parts of the UK and all of society. • New mobility services must be designed to operate as part of an integrated transport system combining public, private and multiple modes for transport users. • Data from new mobility services must be shared where appropriate to improve choice and the operation of the transport system. • Preparing the urban environment, through publishing Building Regulations guidance to support local decisions about the design and allocation of urban space.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• £90 million of funding in Future Mobility Zones. • Unspecified support of the automotive industry to adapt, by continuing to fund the research and development of low carbon technologies.	Medium - 2 - 5 years
Workplace Charging Scheme (WCS)	The scheme is a voucher-based scheme providing support towards the cost of the purchase and installation of chargepoints up to 75% of the costs and capped at £350 for each socket.	2020	• The minimum technical specification for the Workplace Charging Scheme has been updated. Chargepoint models under 'fast DC' with a charging output greater than 3.5kW and not greater than 22kW are now eligible.			• 75% of chargepoint costs up to £350 per chargepoint and maximum 40 chargepoints.	

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
Transport Decarbonisation Plan	The plan that follows on from Decarbonising transport published in March 2020 which set out the scale of reductions from transport needed to deliver the carbon budgets and net zero. The plan now sets out the commitments and actions made to decarbonise the UK transport system.	2021	• A driver should never be more than 25 miles away from a rapid (50kW) chargepoint anywhere along England's motorways and major A roads. • The Energy White Paper sets out framework to ensure that there is investment to power transition to EVs.	• Ofgem is currently reviewing the ways EV charging infrastructure is allocated and has recently published a consultation proposing that all network reinforcement costs should be socialised across electricity bill payers, rather than falling on the individual connecting consumer. • The National Model Design Code sets out a process for developing local design codes and guides, with supporting design guidance on movement and public spaces including streets. It outlines an expectation that development should consist of a well-connected network of streets with good public transport and an emphasis on active travel modes including walking and cycling. • Manual for Streets aligns with these principles and is routinely used for plan making and decision taking to secure better outcomes for our streets and public realm.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• £120 million in zero emission buses through the Zero Emission Bus Regional Areas scheme • £50 million provided through the All-Electric Bus Town or City scheme • £1.3 billion to accelerate the roll out of charging infrastructure • £1.3 billion over the next four years for charging • A new £90 million Local EV Infrastructure Fund, opening in 2022, • £880 million Air Quality Grant • £4.8 billion Levelling-Up Fund • £1.5 billion between April 2015 to March 2021 to support the early market and remove barriers to EV ownership and £2.8 billion package of measures to support the switch to clean vehicles • £1 billion to build an internationally competitive electric vehicle supply chain at pace and scale in the	Medium - 2 - 5 years

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
						UK. • £582 million for new vehicle grants until 2022-23. • £1.5 billion - Transport decarbonisation R&D investment by mode • £1.5 billion - Transport decarbonisation R&D investment by strategic priority	
EV Smart Charging	The Government published its final response to the electric vehicle smart charging consultation that was closed in May 2020.	2021	• Smart charging technology will be required of all new chargepoints, phase one focuses on domestic and some workplace charge-points.	• Interoperability allowing consumers to switch chargepoint operators will be required in Phase Two. • Data share across operators is being explored for commercial opportunities by Government.	• Off-street • On-street		Short - under two years
Ofgem EV Strategy	Ofgem is the energy regulator and has launched a strategy aimed at supporting EV infrastructure and technology while ensuring consumers are protected.	2021	• Support will be given to ensure the network capacity is in place to support the required charging infrastructure. • Costs to large electric consumers such as EV charging infrastructure to be brought down when reinforcement is required.	• Support the development of vehicle to grid technologies where EV owners can earn money exporting electricity back to the grid. • Support the adoption of EVs by working with the sector to ensure the widest range of products, tariffs and services are available.	• Off-street • On-street • EV Forecourts • EV Charging Hubs		Long - 5 years +

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
Net Zero Strategy: Build Back Greener	The strategy outlines the steps to be taken to cut emissions, take advantage of economic opportunities and support private investment.	2021	• By early 2030s 25% of cars will be electric which will require a charging network to support. • Later in 2021 an EV infrastructure strategy will be published. • Support developments in smart charging.	• Support the move to EV for goods deliveries. • In decarbonising the transport sector new employment opportunities will be created. • Local Transport Plans will set out place-based strategies for improving transport networks with focus on carbon reduction and a move to net zero. • Ensure consumers have access to the required technologies.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• £620 million for zero emission vehicle grants and EV Infrastructure, including further funding for local EV Infrastructure, with a focus on local on street residential charging • Allocating a further £350 million from the up to £1 billion Automotive Transformation Fund (ATF) to support the electrification of UK vehicles and their supply chains • £70 million to roll out home, on-street and workplace chargepoints	Long - 5 years +
Rapid Charging Fund	The Rapid Charging Fund (RCF) will support motorway and major A road service operators prepare for net zero.	2021	• By 2023, to have at least 6 high-powered, open-access chargepoints (150-350 kW capable) at motorway service areas in England. • By 2030, we expect around 2,500 high-powered, open-access chargepoints across England's motorways and major A roads. • By 2035, we expect around 6,000 high-powered, open-access chargepoints across England's motorways and major A roads.		• EV Charging Hubs	• Fund £950 million	Long - 5 years +
The Ten Point Plan for a Green Industrial Revolution	The Ten Point Plan outlines key areas of focus and targets for the	2021	• Targeted support on rapid charging points on motorways and major roads.	• In 2021 a Green Paper was to be published which outlines the post-EU emissions regulations.	• Off-street • On-street • EV Forecourts		Long - 5 years +

Policy Title	Summary	Date of publication	Charge-point impact	Key Considerations	Chargepoint solution	Funding Opportunities	Timeframe
	continued development to net zero.			• A focus on building the EV manufacturing industry in the UK	• EV Charging Hubs		
Future of transport: regulatory review: zero emission vehicles	The reviews aim to address outdated transport policies. The review is seeking views on the introduction of requirements to chargepoints.	2021	• Statuary obligation to provide charging infrastructure. • Requirements to install chargepoints in non-residential car parks. • New powers supporting the delivery of the rapid charging fund. • Requirements to improve the experience for electric vehicle consumers.	• The review will consult on whose duty it will be to enact the legislation. This may be local authorities, chargepoint operators or energy companies. • Provision of the chargepoints will likely fall on the landowners. • Accessibility and safety will be key consideration within the user experience.	• Off-street		Short – under two years
Plug-in Grant Scheme	From December 2021 the grant scheme for zero-emission vehicles was updated to target less expensive models.	2021	• There will be £1,500 for vehicles under £32,000 with vehicles that are wheelchair accessible being prioritised with a higher grant. • There are also changes to the Plug-in Van Grant making the scheme more sustainable.	• The aim of the changes to the grant is to increase the speed of EV uptake. This will have an impact on the charging infrastructure requirements.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• Fund £620 million	Short – under two years
Taking Charge: The Electric Vehicle Infrastructure Strategy	The strategy combines the aims, objectives and funding provided by the UK Government.	2022	Outlining the continues support and objectives for charging infrastructure across the UK.	• Outline the strategic aims and objectives of the UK Government for charging infrastructure.	• Off-street • On-street • EV Forecourts • EV Charging Hubs	• £450 million Local EV Infrastructure Fund (LEVI) • A further £50 million in LEVI funding local delivery support • £950 million rapid charging fund	Long - 5 years +

Table M: National EV policies