

Transport for the North

Electric Vehicle State of Play Report

TfN Board – Appendix 2



2023



256,000 EVs* – 2.9% of 8.8m vehicles in the region

2030



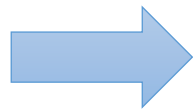
2.6m EVs – 25% of 10.9m vehicles in the region**

15,200 public chargepoints (plugs) in the region. Over double the number from 2 years ago.

*Dec 2023 DVLA data

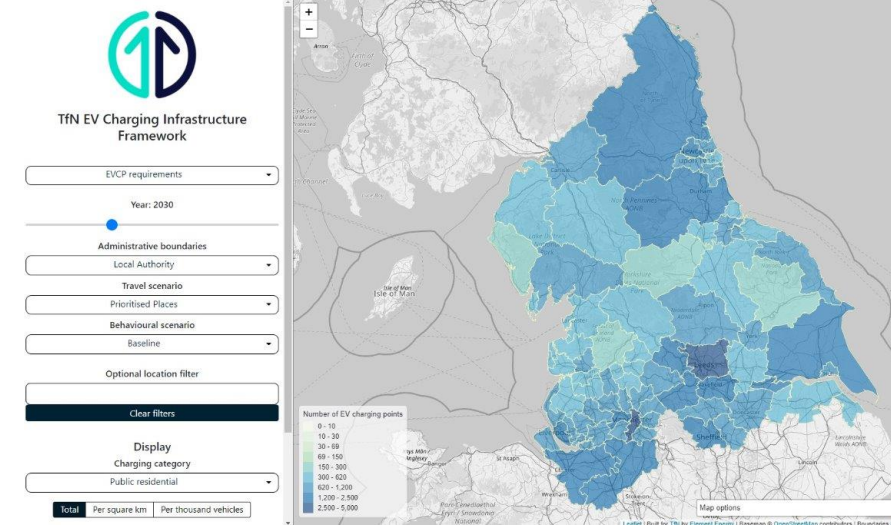
185,000 chargepoints** (plugs). A x12 increase over the next 6 years.

**TfN EVCI framework projection



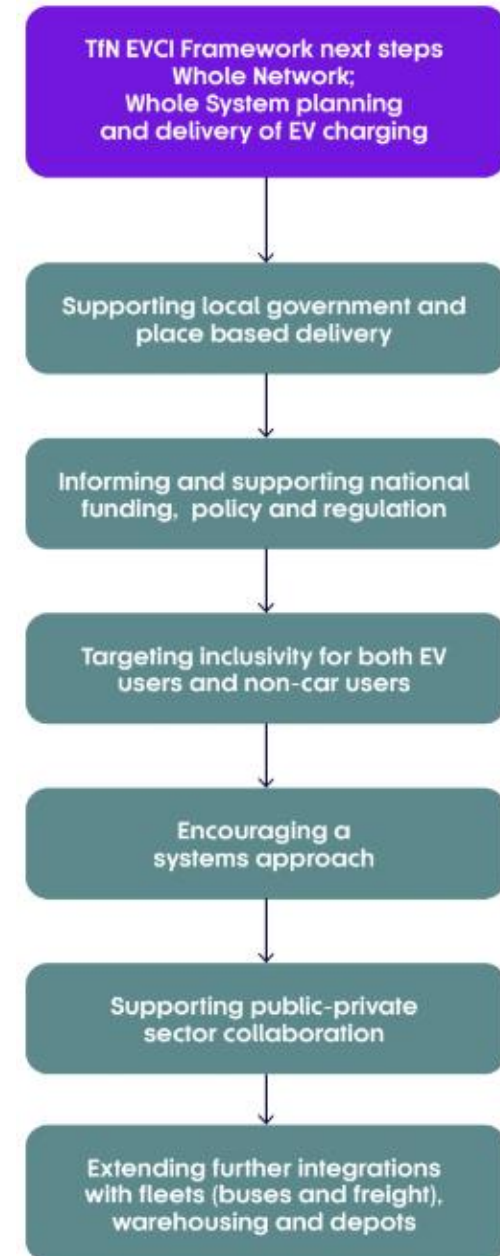
An estimated £3.9bn of investment required***

***Estimate based on assessment of hardware, software, installation and maintenance costs.



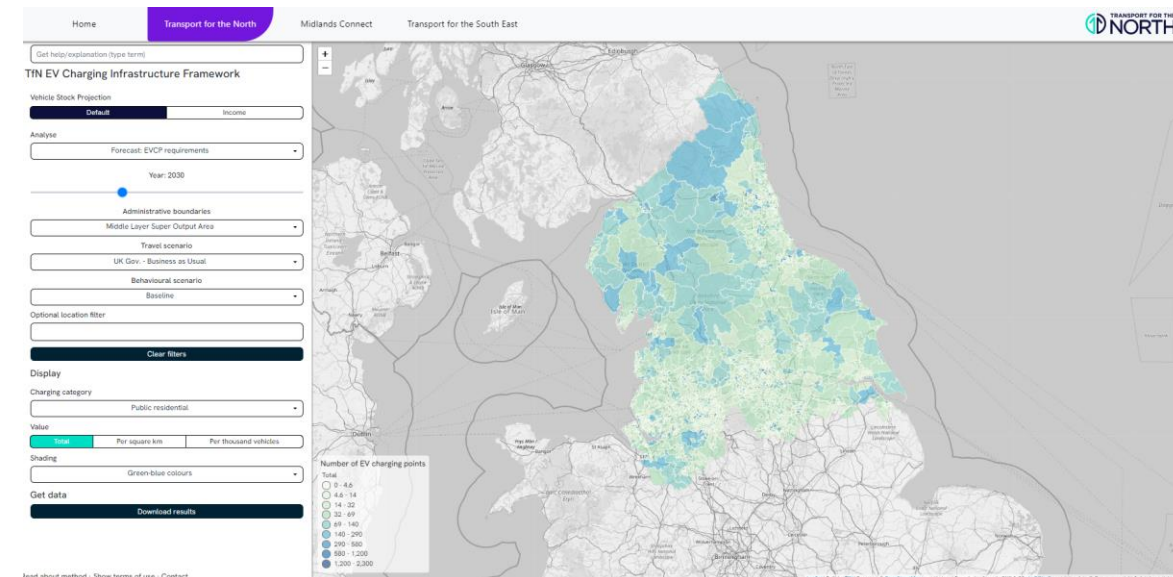
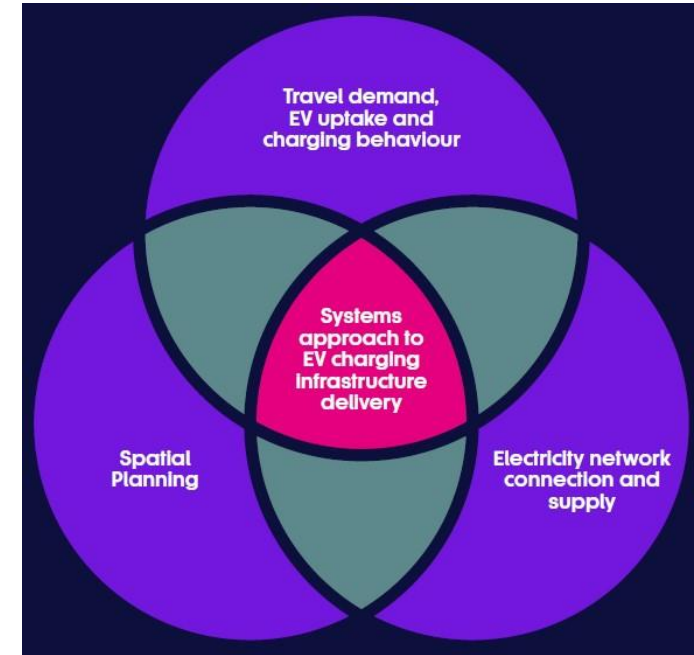
Supporting the EV transition across the North

1. EVCi Framework – analytical support for planning and delivery.
2. Engagement and advocacy.
3. Local EV Infrastructure Fund (LEVI) – actions to support local delivery of national programme.
4. TfN advice on national interventions to support delivery of investment in electric vehicles and enabling infrastructure.



1. EVCI Framework – analytical support for planning and delivery

- Interactive and openly accessible. Actively used by TfN partners and supported via the TfN offer to supplement local delivery.
- National toolkit via STBs
- Two upgrade packages developed to support TfN partners during 2024.
- Capacity to monitor and evaluate progress against forecasted requirements.
- Future upgrades to be prioritised with EV regional forum members.



1. EVCI Framework - analytics enabling place based, user focused and outcome focused strategy

What goes in?

- Demand & network data
- Regional network data
- Dynamic vehicle fleet projections
- All modes (car, van & HGV)
- Seasonal impacts
- Land Use data
- Social data
- Latest intel on charging technology and behaviours

What comes out?

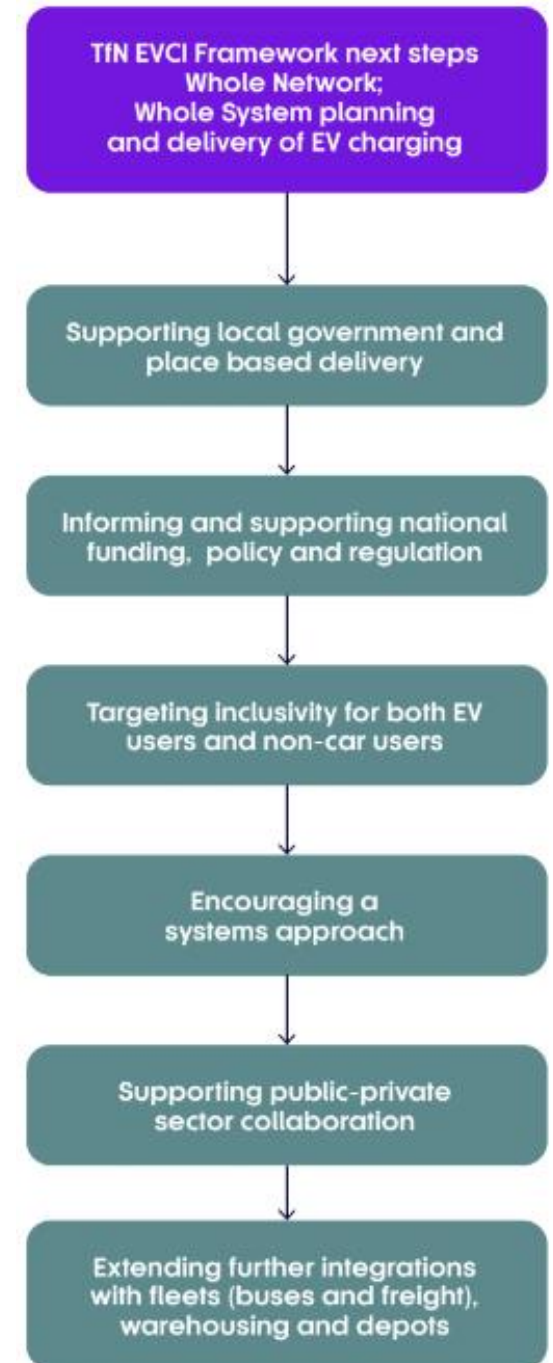
- Rates of EV transition (BEV & PHEV)
- Forecast charging requirement (by charging type)
- Electricity grid requirement
- Potential sites for rapid charging
- SRN / MRN rapid charging needs heat mapping (TfN)
- Deployed charging data (TfN)
- Co2 emission reductions from fleet change (TfN)

How can it be viewed?

- 5-year increments to 2050
- Geographic options - Regional, Local Authority and MSOA levels.
- Charging data by point, zone or route depending on selections.
- Option to add various travel demand scenarios.
- Different user behavioural scenarios.
- Total, by density or per thousand vehicle registered in an area.

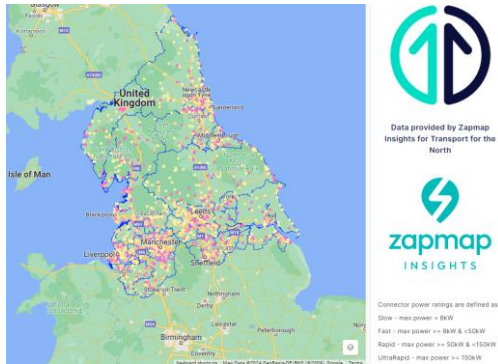
1. EVCI Framework - what the TfN EVCI Framework is used towards?

1. Whole network view which informs Local Authority plans, strategies and delivery.
 - Support via TfN's EV regional partner group
 - Evidencing and supporting public spend – LEVI & ORCS
 - EV strategies, Local Transport Plans, Local Area Energy Plans
2. Evidence provided to Government and others (i.e. Transport Select Committee) on charging requirements, policy and legislation decisions. Strategy published Dec 2022. TfN and local partners developing recommendations to further support EV transition (during 2024).
3. Informing delivery partner activities (i.e.):
 - National Highways activities (road investment decisions and Rapid Charging Fund)
 - Rail North / Trans-Pennine Rail Upgrade
4. Drawing in private sector interest, collaboration and investment into the region.
5. Shaping systems approach to facilitate accelerated delivery on pan-regional priorities. Data collaborations with DNOs, National Grid and Ofgem (new Regional Systems Planner strengthens the role of regional strategic planning).

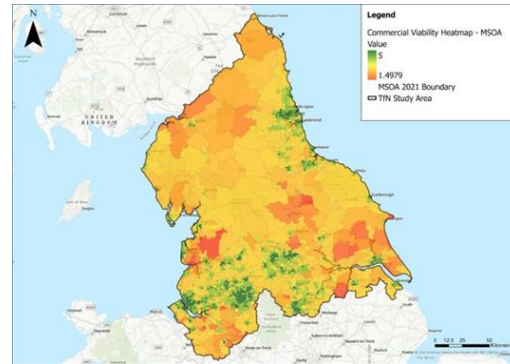


1. EVCI Framework - example enhancements coming soon...

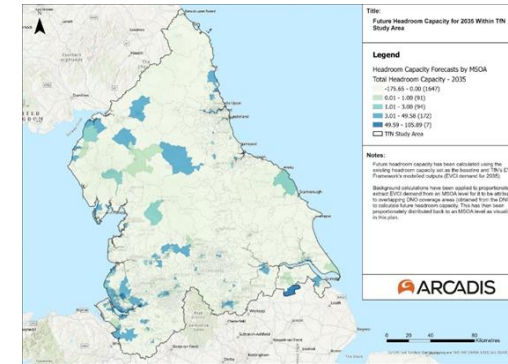
Monitoring current vrs required charging and sharing data with LAs.



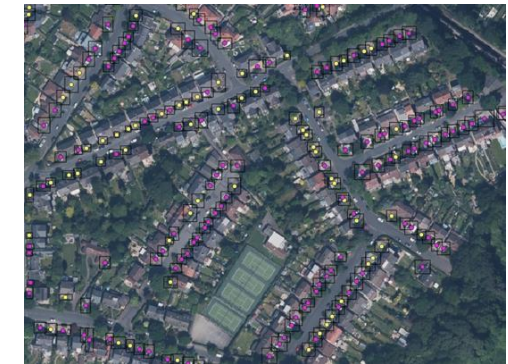
Mapping chargepoint investment commercial viability to MSOA level



Measuring primary substation headroom through to 2035



Mapping on/off street parking provision across all 6.4m residential households



2. TfN led engagement and advocacy

Regional EV engagement

- Multi-agency forum focused on evidencing the regions strategic infrastructure needs.
- Facilitating knowledge sharing, expertise and collective views on live issues.
- Supporting local partner strategy, planning and delivery actions.

Private sector (CPOs)

- EVCI Framework communicates investment opportunities across the region.
- Improving understanding of, and connections with, suppliers.
- Valuable feedback on LA procurement and contract approaches.

National Government & delivery body's

- Engagement and advice with Government departments.
- Representation at LEVI Advisory Boards.
- Application of evidence with National Highways & Rail North.
- Shaping cross-infrastructure and public-private partnerships.

3. Local EV Infrastructure (LEVI) fund – actions to support local delivery of national programme.

- MCA and LTA partners requested TfN support regarding delivery challenges of LEVI.
- TfN have engaged with the Office for Zero Emission Vehicles with a view to addressing challenges in ways that remove barriers and enabling delivery. Key topics include:
 1. Urgent timeframe reprogramming to ensure effective delivery and management of risk.
 2. Need for better communications, consistency and clarity. Options include adapting TfNs regional EV forum to support sharing of delivery experience, and impartial monitoring and assurance reviews where requested.
 3. Opportunities to improve private sector understanding and manage risks.
 4. Process improvements – greater emphasis on empowering local planning and funding decisions accounting for actions ‘on the ground’, offers a way to simplify processes and accelerate delivery; ensuring a regional whole network outcome; applying lessons from pilots and early tranches; release of enabling guidance.
 5. Capability funding – resource funding to reflect existing programme delays; review success and coverage of funding.
 6. Alignment across Sectors – highlighting the importance of multi-organisation approach to support effective delivery and ensuring grid connections required to support expansion of EV charge points.

4. TfN advice to support delivery of investment in Electric Vehicles

- TfN regional strategy (Oct 2022) – TfN board agreed EV roll out requires a ‘whole network, whole system’ approach at a regional scale, accounting for user movements across individual local authority boundaries.
- TfN and partners (via the regional EV forum) have identified actions to continue shaping a rapid and equitable EV transition.
- Proposed ‘State of Play’ report aimed at promoting key messages from the region to support and inform national actions, to tackle risk and seize opportunities to improve delivery.
- 6 themes:
 - Vehicle access
 - Charging rollout for cars, vans and HGVs
 - Inclusivity
 - Transport and Energy
 - Sustainability
 - Skills



Considerations – that TfN Board:

- a) **Notes** analysis of EV uptake and supporting charging infrastructure deployment progress against evidenced future need.
- b) **Notes** TfN's actions to support partners across the region, including new evidence capabilities available alongside ongoing partner support.
- a) **Endorses** TfN's Electric Vehicle State of Play report at **Appendix 4**, and next steps to work with our partners (nationally and across the North) on operationalising these actions.

