

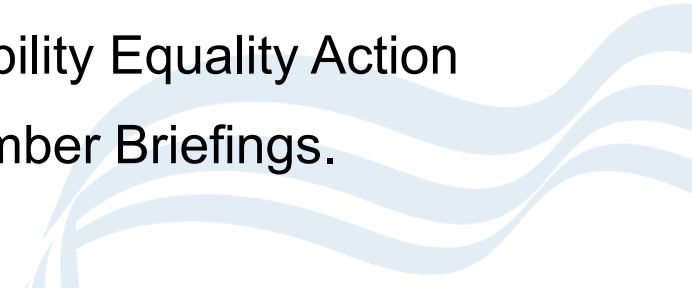
Electric Vehicle Charging Infrastructure Strategy



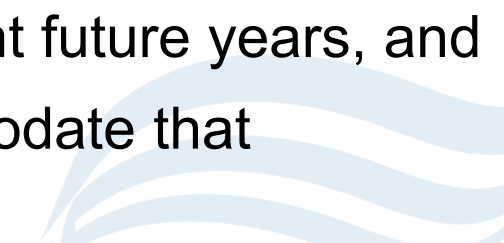
Coventry City Council

coventry.gov.uk


Background

- In 2019, the Government declared a target to reach net zero greenhouse gas (GHG) emissions by 2050.
 - From 2030, there will be a ban on the sale of new petrol and diesel cars and vans, with a ban on hybrid cars and vans from 2035.
 - In 2022, the UK Electric Vehicle Infrastructure Strategy was published. This sets out the national vision for the rollout of charging infrastructure. It includes an obligation for all Local Authorities to develop a local EV Charging Infrastructure Strategy.
 - This EVCI Strategy has been through several reviews including Disability Equality Action Partnership, Future Cities Board, Leadership Board and Cabinet Member Briefings.
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Case for change

- Transport accounts for a significant portion of emissions with cars and taxis accounting for 61% of road transport emissions, and vans accounting for 17%.
 - The switch to EVs will reduce CO₂ and NO_x emissions, but there are still particulate matter emissions from tyre wear and braking.
 - The Zero Emission Vehicle mandate came into force in January 2024, which increases the proportion of EVs to be sold by car and van manufacturers each year up to 2030.
 - The Strategy sets out the anticipated number of EVs in different future years, and the number of chargepoints that would be required to accommodate that demand.
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The EVCI Strategy

- Focuses on increasing charging provision for electric cars, vans and taxis
 - The purpose of this strategy is to identify the number of electric vehicle chargepoints that will be required to meet future demand
 - The vision of the Strategy is intended to be realised over a 10-year period but focuses on the first 5 years initially.
 - Once adopted, the Strategy will be refreshed annually
 - The Strategy includes forecasts of future number of EVs, chargepoints required, emissions reductions and cost savings.
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Summary of Strategy

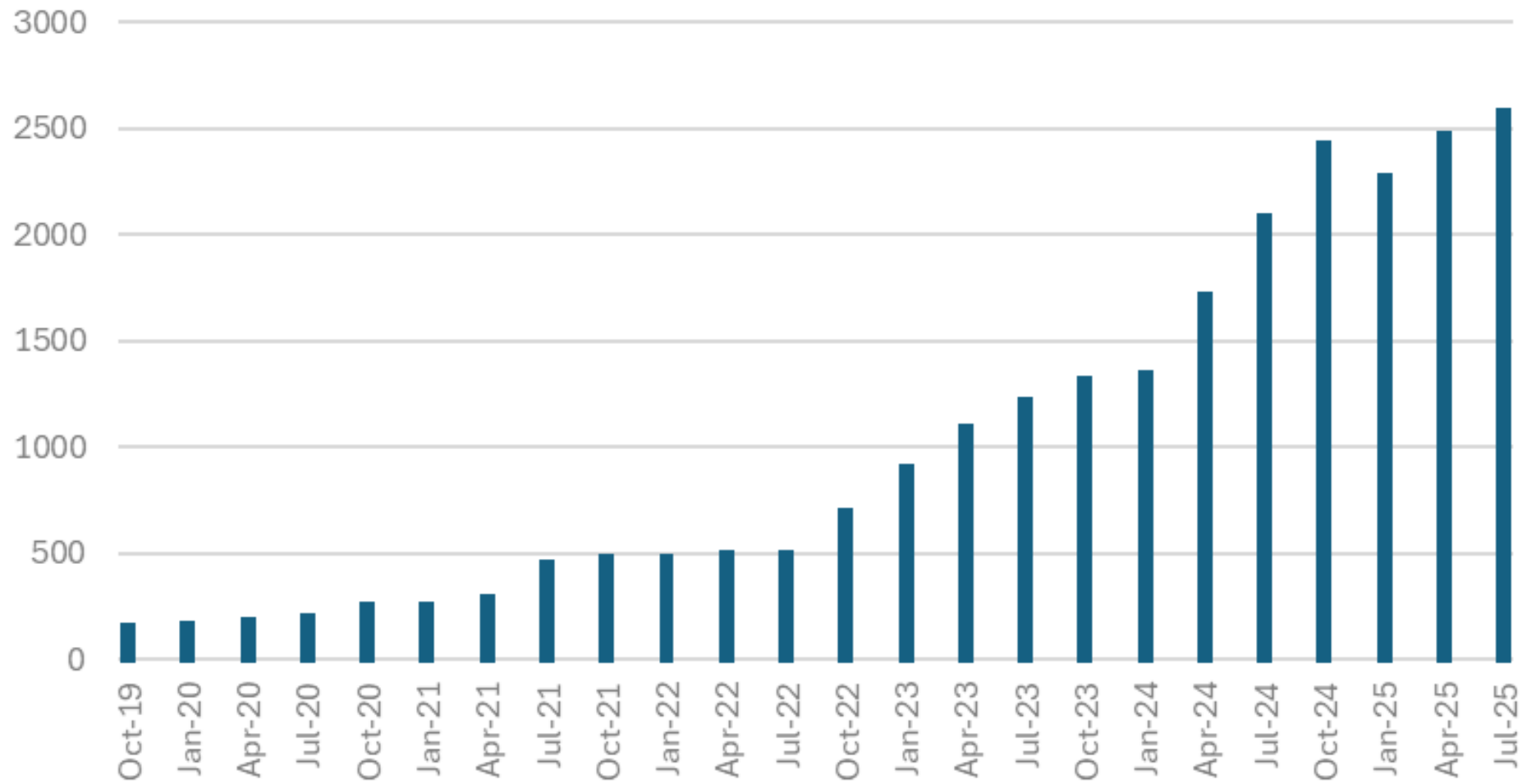
- 10-year Strategy, to be refreshed annually
- Current EV chargepoint supply is 8.5 years ahead of demand
- Highest number of chargepoints in UK outside of London (3rd including London)
- 67.6% of dwellings without driveways in Coventry now within a 4-minute walk of a lower powered chargepoint
- Formalise Council's plan for future installations, including pilot schemes for gully charging and residential charging hubs

Current status of electric vehicle adoption

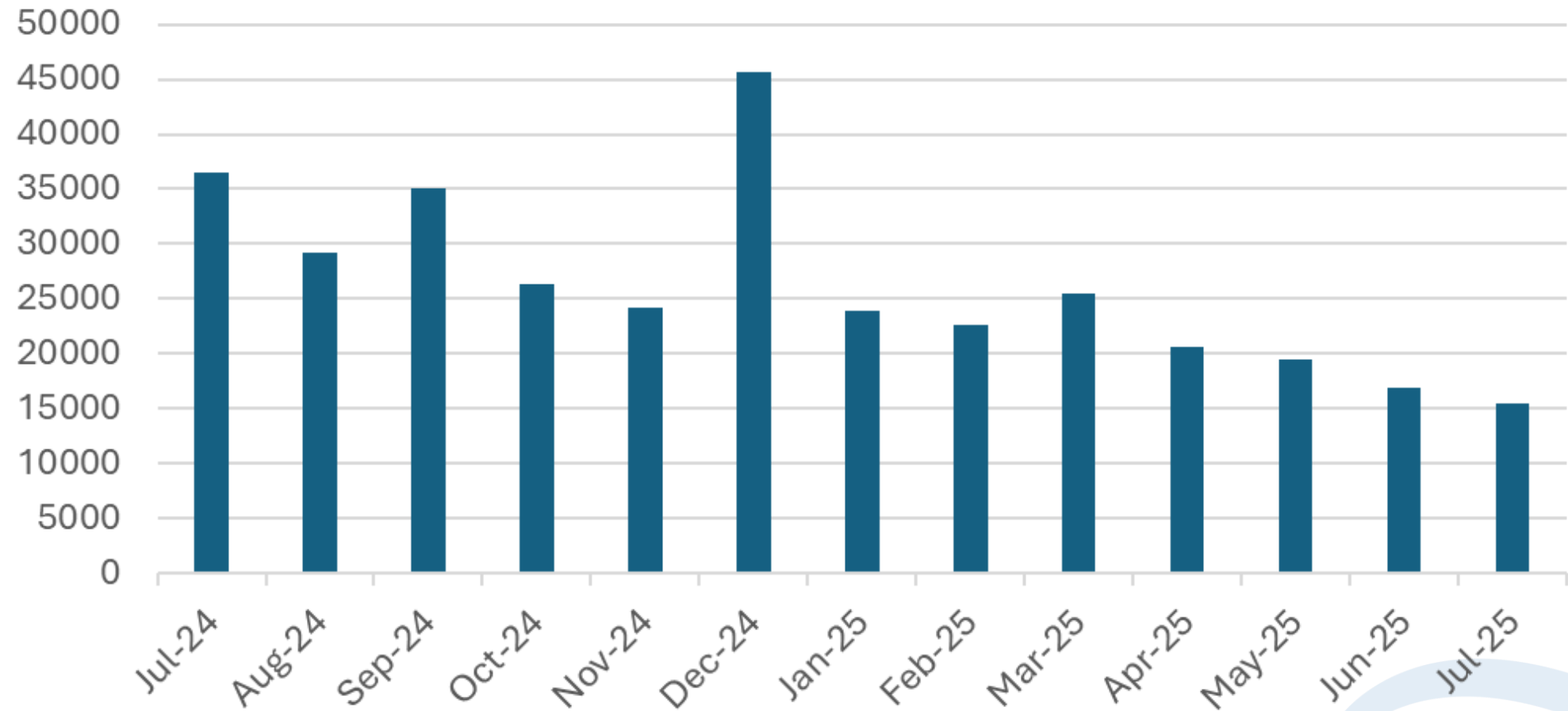
	% of cars and vans that are electric	% of cars and vans that are plug-in hybrid	Total %
Coventry	2.59%	1.83%	4.42%
WMCA	2.48%	1.34%	3.82%
UK	2.82%	1.51%	4.33%

Local Authority	Total public charging devices	Total public rapid charging devices	Charging devices per 100,000 population
Coventry	2,084	79	586
Solihull	343	65	158
Birmingham	583	188	50
UK	64,632	12,474	96

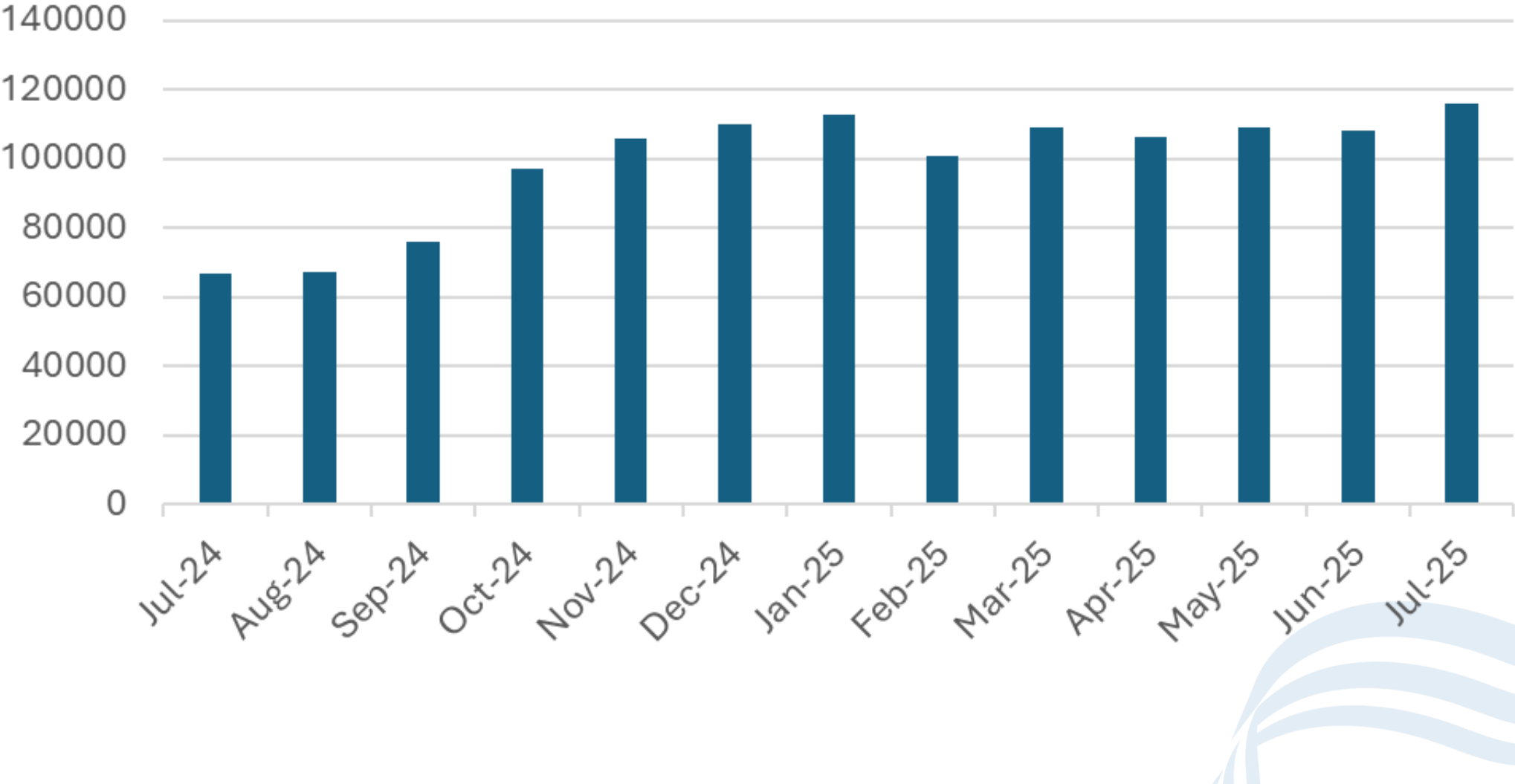
Number of EV Chargepoints in Coventry



Rapid Charging Utilisation



Residential Charging Utilisation



Future projections

- In 10-year lifetime of the strategy, number of EVs projected to increase from 4.42% to 49%
- Realistic projections - considers likelihood to buy an EV, government legislation on car sales and consumer habits in changing cars
- Number of chargepoints needed in 10 years will be 1,686 – we are already ahead of this figure
- Individual policies sets out how we will diversify types of charging infrastructure (gully channels, lamppost/gully charging, residential and supercharging hubs)
- Strategy will support the Council's position when submitting further funding applications

Year	2030	2035	2040
% cars and LCVs that are electric	24%	49%	73%


Number of sockets	Baseline
2030	917
2035	1,686
2040	2,319

The Benefits

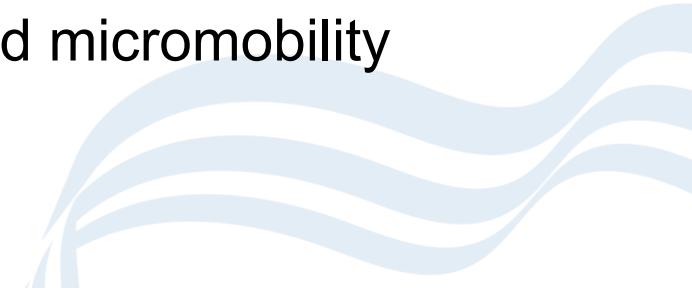
- Improved and expanded charging network that everyone can access
- Solar PV panels and battery storage will be installed where possible at charging hubs, increasing renewable energy generation capacity
- Significant reductions in CO₂ and NO_x emissions, as well as PM_{2.5} tailpipe emissions
- Reduced vehicle emissions will result in health, social and financial cost savings



The Challenges

- Grid capacity can vary across Coventry, meaning some sites may not currently be viable
 - Site specific factors to consider for installation, such as other street furniture
 - The pace of transition from petrol and diesel to electric may differ from forecasts
 - Although PM2.5 tailpipe emissions will significantly reduce, there will still be PM2.5 emissions from road, tyre and brake wear. To reduce wear emissions, the overall number of vehicles miles driven needs to reduce
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Delivering the Strategy

- Strategic Energy Partnership with E.ON and existing contracts with chargepoint operators
 - Existing contracts have revenue share arrangements, which are ring fenced for future chargepoint delivery
 - Planned projects include the Local Electric Vehicle Infrastructure fund pilot for residential charging hubs, pavement gully channel charging and micromobility charging hubs
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Next steps

- The EVCI Strategy has been approved by Councillor O'Boyle as Cabinet Member for Jobs, Regeneration and Climate Change
- It will now be published on the Coventry City Council website in an interactive format, similar to the Transport Strategy
- **No action is requested from Scrutiny Board**

