

Electrifying Bus Travel in Warrington



Warrington Borough Council and Warrington's Own Buses



APSE Energy Event - Warrington - 28 May 2025

Stephen Hunter

Transport for Warrington



WARRINGTON
Borough Council

Better by *Electric* **Bus**



Before:



WARRINGTON
Borough Council

Now:

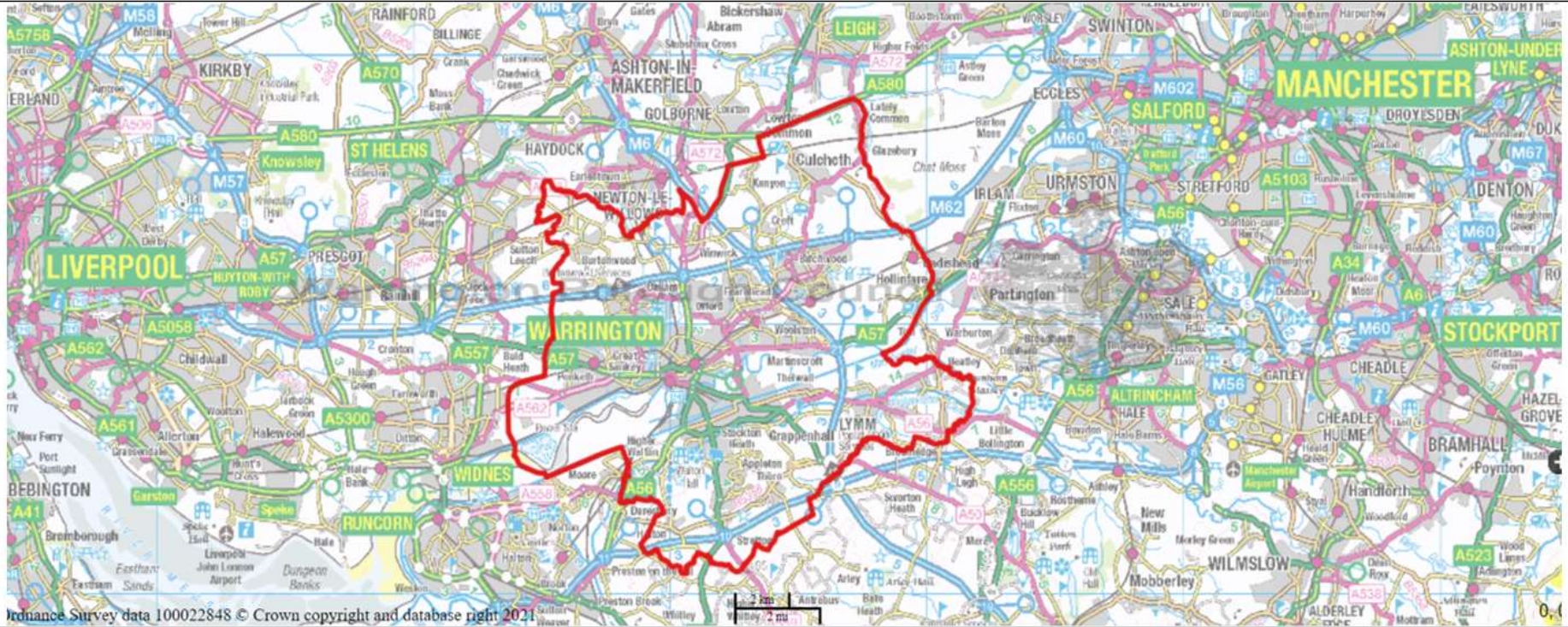


WARRINGTON
Borough Council

Background / Context - Warrington

Area of Borough: 176 square kilometres

Estimated population: 210,014 (mid-year 2020)



WARRINGTON
Borough Council

Warrington Local Transport Plan

- Statutory Plan – part of council's constitution
- LTP4 – Approved December 2019

Vision statement:

“Warrington will be a thriving, attractive, accessible, and well-connected place with popular, high-quality walking, cycling, and **public transport networks supporting our carbon-neutral future.”**

- New LTP guidance awaited from DfT
- Greater emphasis on carbon reduction expected

Background / Context - Warrington

With our Local Transport Plan and Bus Service Improvement Plan we aim to:

- Overcome dependency on the car and support Warrington aspirations to achieve modal shift to sustainable modes; supporting also efforts to improve air quality and health levels and address the declared Climate Emergency.
- Seek to reverse falling bus patronage, exacerbated by COVID-19 pandemic.
- Address congestion for buses on strategic corridors and provide greater journey time reliability.
- Address variable quality in bus provision and infrastructure.

To increase the attractiveness of using bus services thereby improving sustainable travel and deliver some of the aspirations contained within Local Transport Plan 4.

Warrington Zero Emission Buses (ZEBRA)

IMPROVING AIR QUALITY

Approximately 145 people annually in Warrington are expected to die prematurely from poor air quality.

Bus travel accounts for 1% of distance driven on Warrington's roads, yet accounts for 11% of NOx and 5.7% of PM2.5 of traffic emissions.

Over a 12 month period across it has been estimated that changing to an electric fleet would lead to the equivalent emissions savings of:

- NOx: 48,942 Kg
- PMx: 854 Kg
- CO2: 6,670 tonnes



The need for Zero Emission Buses in Warrington

Air Quality Management Area Locations

1 on motorway network

1 surrounding the town centre and the main arterial roads



Air Quality Impact on Local Community

1,435 residential properties in AQMAs

Approximately 2,800 residents live in an AQMA

Warrington Council and WOB

A close working relationship between the local authority and Warrington's Own Buses, a municipal bus operator wholly owned by the Council, allowing:

- Collaborative working on ZEBRA proposals and other improvements to bus services
- Community benefits such as apprenticeships, local supply chain, and a community response to emergencies such as the Covid-19 pandemic
- Shared priorities between council and operator
- The Council to make a substantial investment into WOB to allow it to operate an entirely new electric vehicle fleet via the ZEBRA scheme

Electrifying Bus Travel in Warrington (ZEBRA)

- During **2021** – the ***'stars aligned'***
- Better By Bus published – English National Bus Strategy – post COVID recovery
- Warrington's Own Buses current depot to be relocated away from a prime brownfield regeneration site – UK Government funding secured for this
- Decision taken **at risk** to future proof new depot with underground services to make it 'electric ready'
- August 2021 – Full Business Case for ZEBRA Submitted – Fast Track Round – Funding awarded late 2021 - 75% of the cost of the difference between the purchase price of a diesel bus fleet and an electric bus fleet & 75% of infrastructure costs covered
- Scottish Power Energy Networks (SPEN) confirmed grid capacity
- All based on full 105 bus fleet replacement with electric buses
- Council able to purchase the buses and sell them to Warrington's Own Buses at a nominal cost – investing in its own company's future
- Purchase to be funded by ZEBRA funding and Council investment

Issues / Challenges / Solutions

- **In 2021 – the ‘stars aligned’ – but it has taken until 2024 for full delivery – Why?**
- Electricity prices and reduced differential versus diesel – solar farm ownership mitigation
- Price increases for sub-station provision, chargers and buses – exacerbated by Russia / Ukraine war and general inflationary pressures
- Prices not being held for long and long lead times for chargers and buses
- Subsidy Control Act 2022 – referral of subsidy to Competition and Markets Authority
- Increased costs of borrowing for the Council investment
- Reduction from 120 to 105 buses – just replacing existing fleet
- Alignment of infrastructure versus bus delivery
- Reliance on District Network Operator (DNO) and securing of energy contract
- Impact on engineering staff – future maintenance requirements
- Monitoring and evaluation

It's not just about Electrifying Buses.....



WARRINGTON Borough Council | UK Government

Better BY BUS!

Have you spotted a yellow bus yet?
They are part of our new electric bus fleet



warrington.gov.uk/ZEBRA



Better BY BUS!

Under 22
Get **£1** singles



Better BY BUS!

Free concessionary pass travel at any time



NEW electric buses

Better BY BUS!

EXPLORE WARRINGTON BY BUS

£2 singles for adults
Free concessionary pass travel at any time



Plus, our new fleet of electric buses coming soon!

WARRINGTON Borough Council | UK Government



WARRINGTON
Borough Council

A49 Winwick Road Bus Priority



Bus Shelter Replacement Programme



15 year contract
£m income
55 WBC shelters
Free advertising



Electrifying Bus Travel – Key Outcomes

- New All-Electric Depot provided for Warrington's Own Buses
- Former Depot site now available for development alongside neighbouring sites in a prime edge of town centre location close to Warrington Bank Quay Gateway – links to Northern Powerhouse Rail
- Full 105 bus diesel fleet replaced with Zero Emission Electric Buses – 53 double headed chargers
- Step change in vehicle quality – enhanced accessibility, passenger comfort and USB ports on every seat
- Substantial reduction in operating and maintenance costs – improved financial position for WOB – ability to run more services and generate passenger growth
- Vital this decarbonisation not done in isolation – alongside BSIP measures such as enhanced services, cheap fares and bus priority

