



Local E-Motion

Electric transport hubs in North Yorkshire

Harry Baross – Climate Change Programme Manager



Local E-Motion

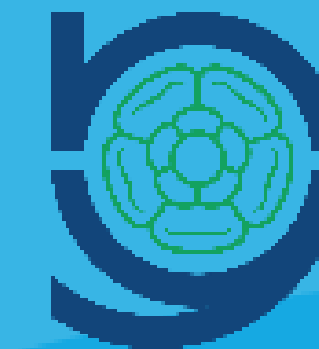
- Local Context
- National Solutions
- Local Engagement
- Option Shortlisting
- Business Case Development
- Next Steps



UK Government



York & North Yorkshire
**LOCAL ENTERPRISE
PARTNERSHIP**



North Yorkshire
County Council



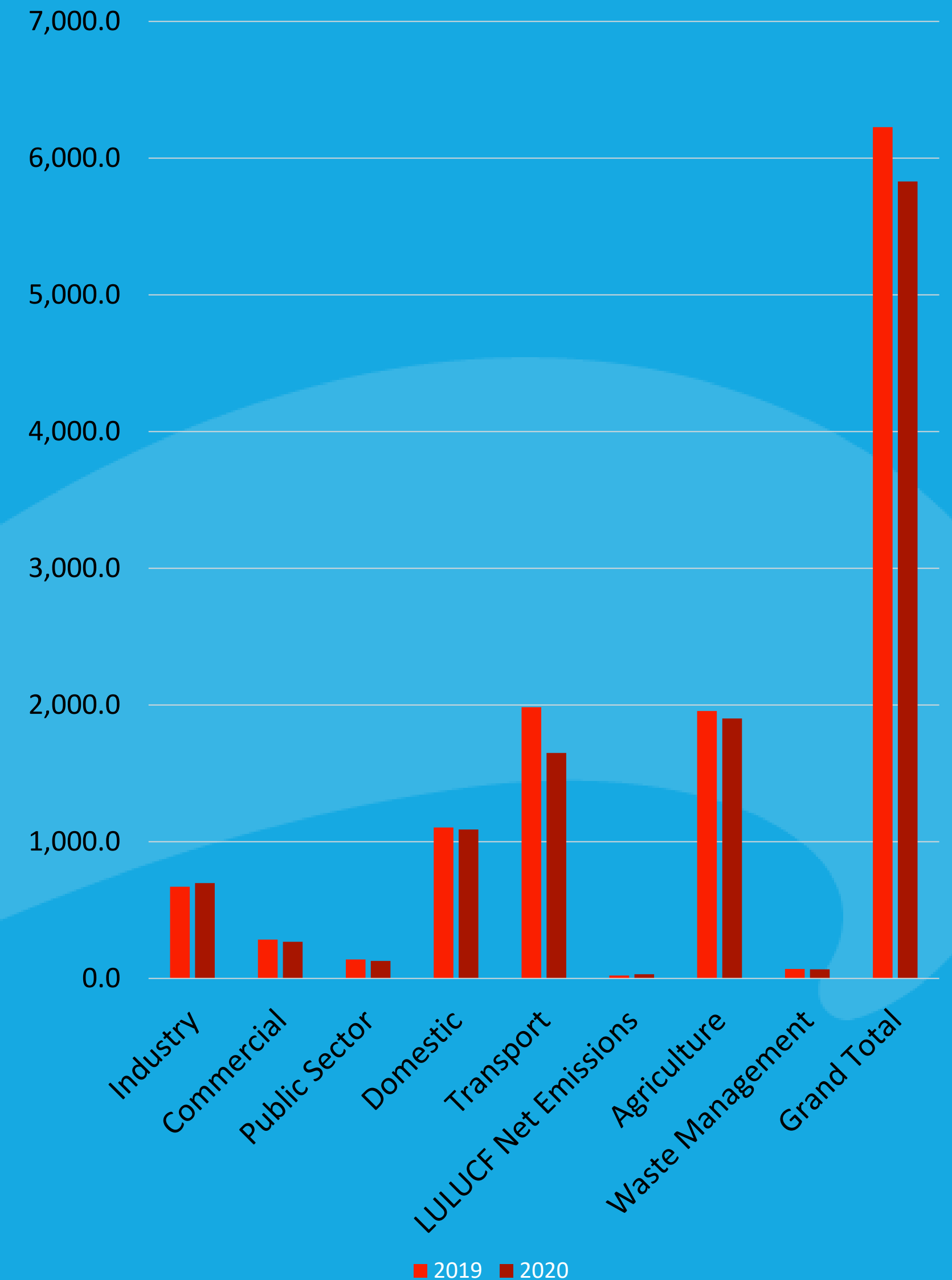
SCARBOROUGH
BOROUGH COUNCIL

Local Context



Local Context

- North Yorkshire aims to be carbon negative by 2040
- Transport one of the highest sources of GHG emissions
- Over 85% of the county is 'super sparse'
- Pockets of some of the most deprived areas in the UK
- Small towns, coastal communities, rural villages
- Two national parks



National Solutions

The headline acts

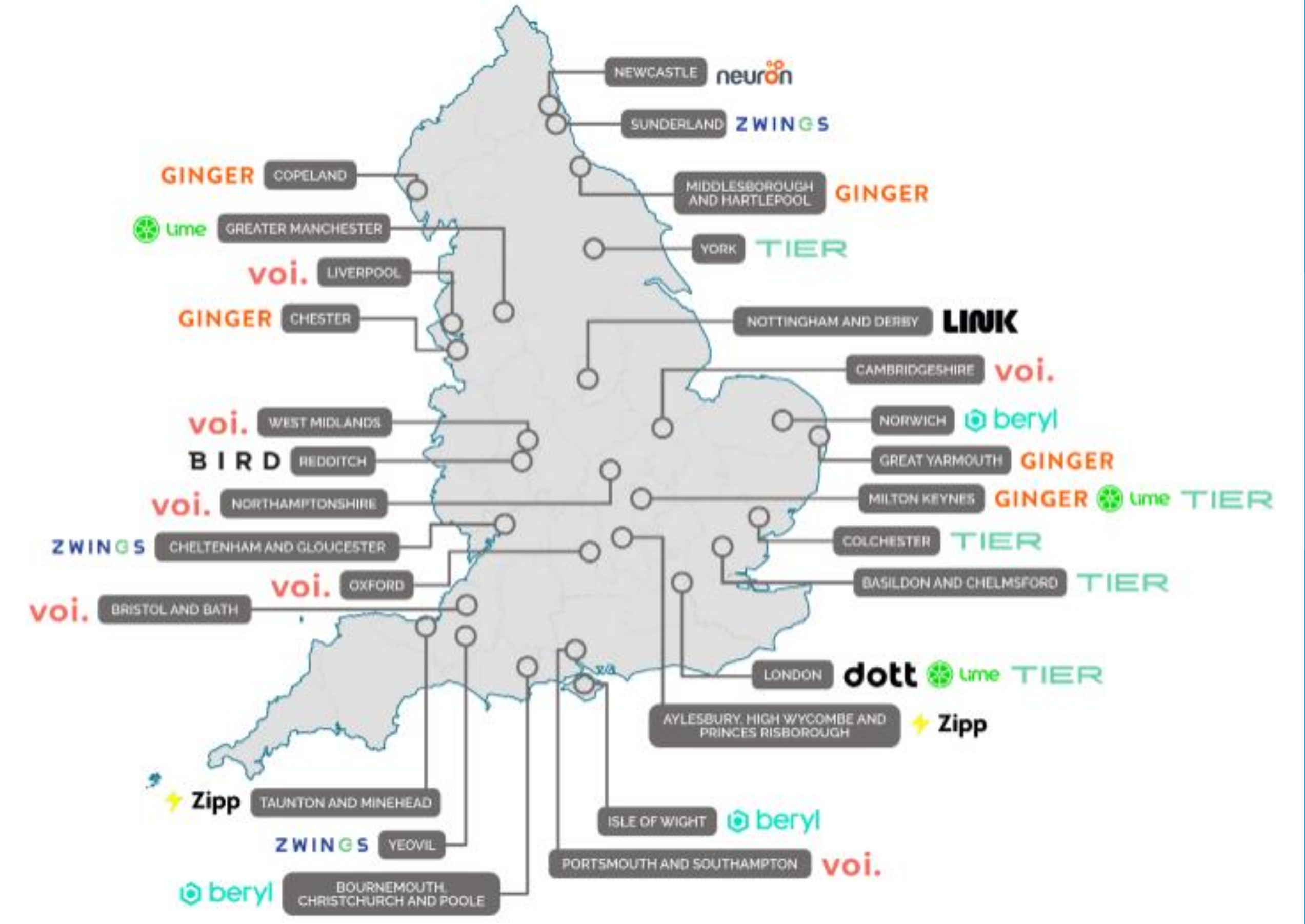
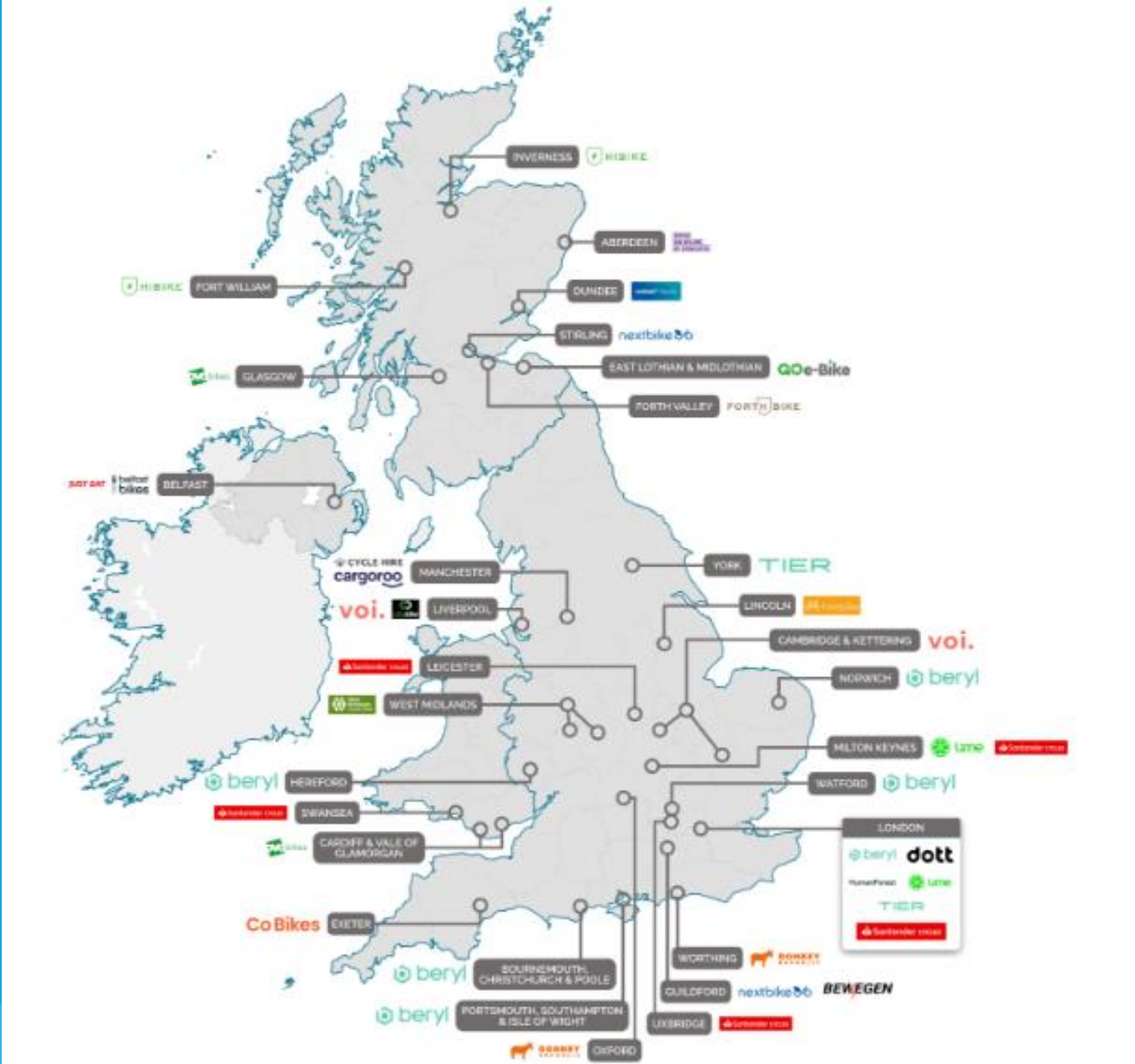
- Public transport
- 15 minute cities
- Mass EV uptake

The supporting artists

- Car clubs
- DRT
- E-bikes
- E-scooters



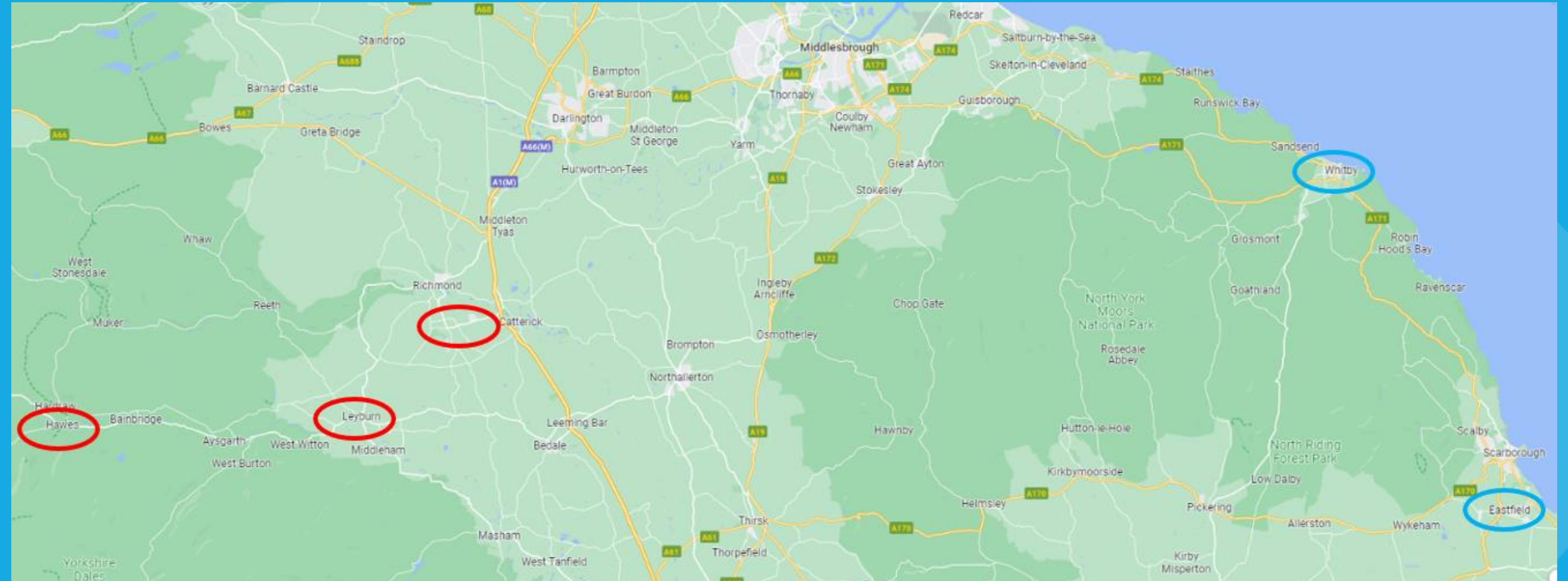
National Solutions



HOW DO WE GET THE BIG
CITY SOLUTIONS TO WORK
IN NORTH YORKSHIRE?

Local Engagement

- Whitby
- Eastfield
- Catterick
- Leyburn & Hawes



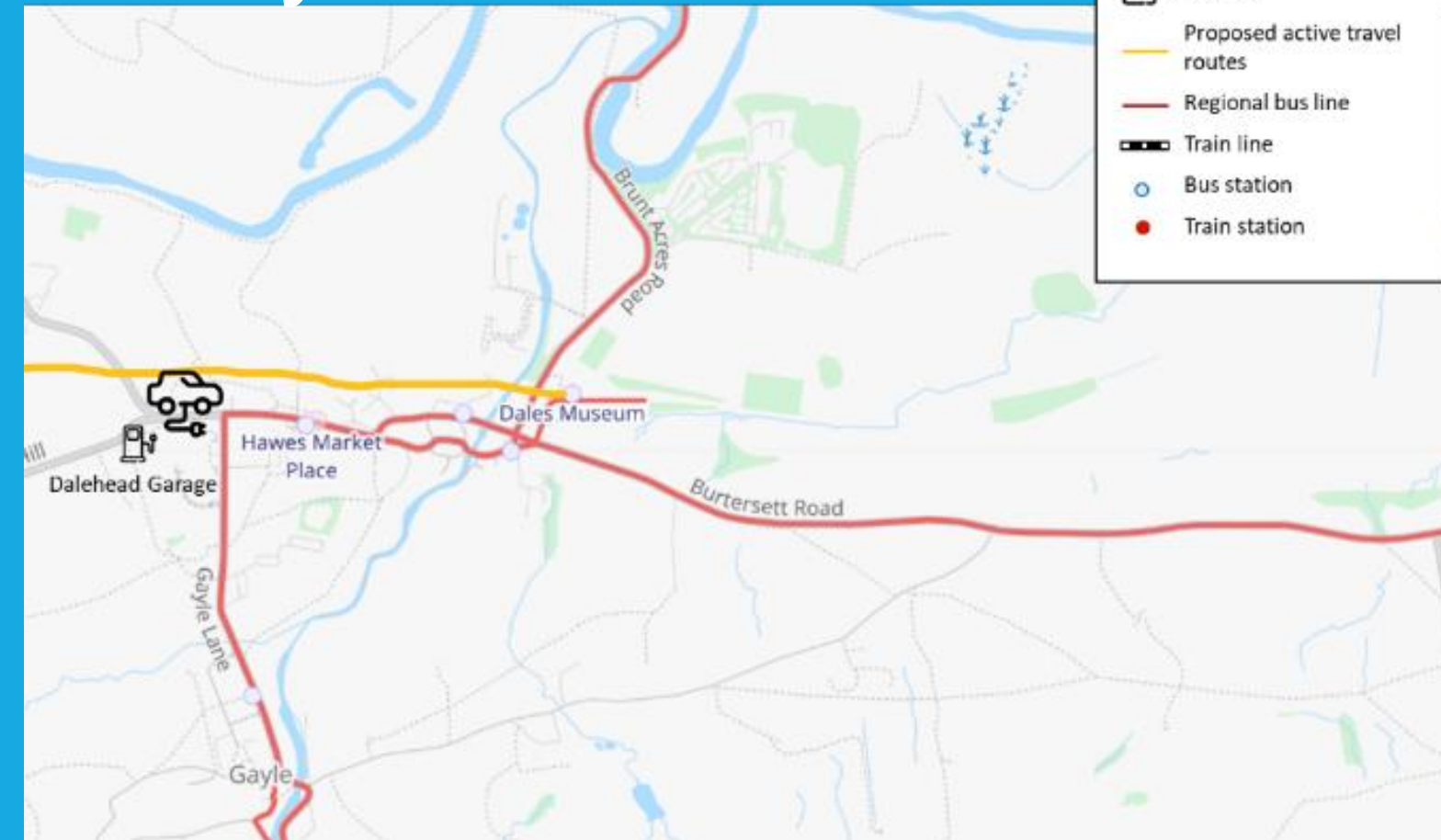
Local Engagement

- Desk-Based Analysis - current/forecast provision of public transport, EV charging, shared mobility
- Online Survey - gathering data on attitudes towards and interest in shared e-mobility from local residents
- Stakeholder interviews - community groups, business representatives
- Co-Creation Workshops - to gather input from potentially excluded groups
- Scheme Development - assimilating data to scope 4 longlisted schemes.

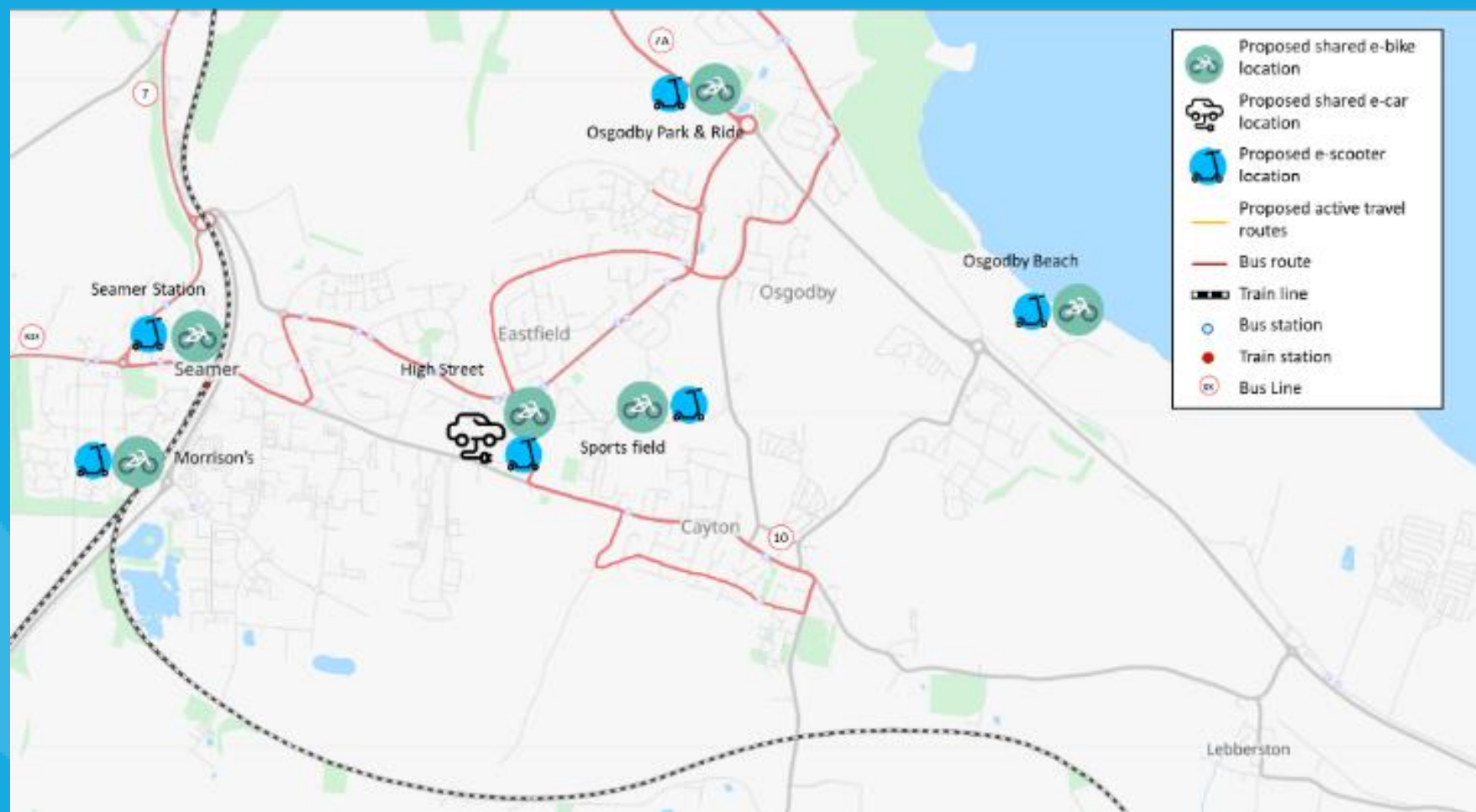
Option Shortlisting

Leyburn & Hawes

Catterick



Eastfield



Whitby



Option Shortlisting

- Bespoke multi-criteria assessment tool to give comparative scores to the four schemes
- Weightings agreed with project steering group, based on project and organisational objectives
- Objective was to determine preferred site in each area
- Catterick vs Leyburn & Hawes
- Whitby vs Eastfield

Criteria Type	Description	Weighting (%)
Environmental Impact	CO ₂ reduction and air quality	25%
Equitability	Current deprivation in the area	25%
Uptake Potential of Shared Schemes	Likelihood of successful implementation	15%
Wider Area Suitability (Macro)	Suitability for mobility options in the area	12.5%
Location Suitability (Micro)	Suitability for a mobility hub at the proposed premises	12.5%
Chargepoint Provision	Demand for and current provision	5%
Capital Investment	Capital cost of scheme	5%

Option Shortlisting

Criteria Type	Catterick	Leyburn & Hawes
Environmental Impact	22.6	4.6
Equitability	10.6	7.5
Uptake Potential of Shared Schemes	13.5	10.1
Wider Area Suitability (Macro)	9.0	6.9
Location Suitability (Micro)	11.5	7.6
Chargepoint Provision	4.8	4.3
Capital Investment	2.2	5.0
TOTALS	74	46

Criteria Type	Eastfield	Whitby
Environmental Impact	23	23.3
Equitability	25	23.8
Uptake Potential of Shared Schemes	14	14.0
Wider Area Suitability (Macro)	12.2	10.0
Location Suitability (Micro)	8.9	9.6
Chargepoint Provision	4.5	4.5
Capital Investment	2.6	2.1
TOTALS	90	87

- Catterick and Eastfield preferred schemes
- Additional funding obtained to further study Whitby

Business Case Development

- Treasury style business cases developed using Green Book and DfT's Transport Analysis Guidance
- Strategic case – how it fits into local context
- Economic case – the value of environmental and social benefits
- Commercial case – how commercial deliverability
- Finance case – how much it costs and earns
- Management case – how the schemes would be managed

Business Case Development

- Monetised benefits – Emissions:
 - Carbon dioxide (CO₂)
 - Particulate matter (PM10)
 - Nitrous Oxides (NOx)
- Monetised benefits – Social impact:
 - Reduced congestion
 - Reduced severity of accidents
 - Reduced noise
 - Health benefits of cycling and reduced risk of premature death
 - Reduced absenteeism due to health benefits
 - Reduction in indirect taxation

Business Case Development

- Costs - Catterick: £221k; Eastfield: £251k; Whitby: £277k
- Social value Benefit Cost Ratios above 1 with high uptake
- Operator income up to £1.5m over 10 years

	Catterick	Catterick	Eastfield	Eastfield	Whitby	Whitby
Usage Scenario	Low	High	Low	High	Low	High
Low prices	0.90	1.81	0.54	1.03	0.76	1.53
Central prices	1.05	2.12	0.68	1.28	0.92	1.83
High prices	1.21	2.43	0.83	1.53	1.07	2.14

Next Steps

- Exploring funding opportunities, e.g. SPF
- Engaging with potential operators
- Detailed site designs
- Tendering for service providers
- Tendering for construction

Thanks for listening

Harry Baross

harry.baross@scarborough.gov.uk

[Community Renewal Fund \(ynylep.com\)](http://ynylep.com)