

TfN Regional Decarb Strategy



Adam Adamson
Transport for the North

Our role and remit



Elected
politicians



Business
leaders

Local Transport Authorities

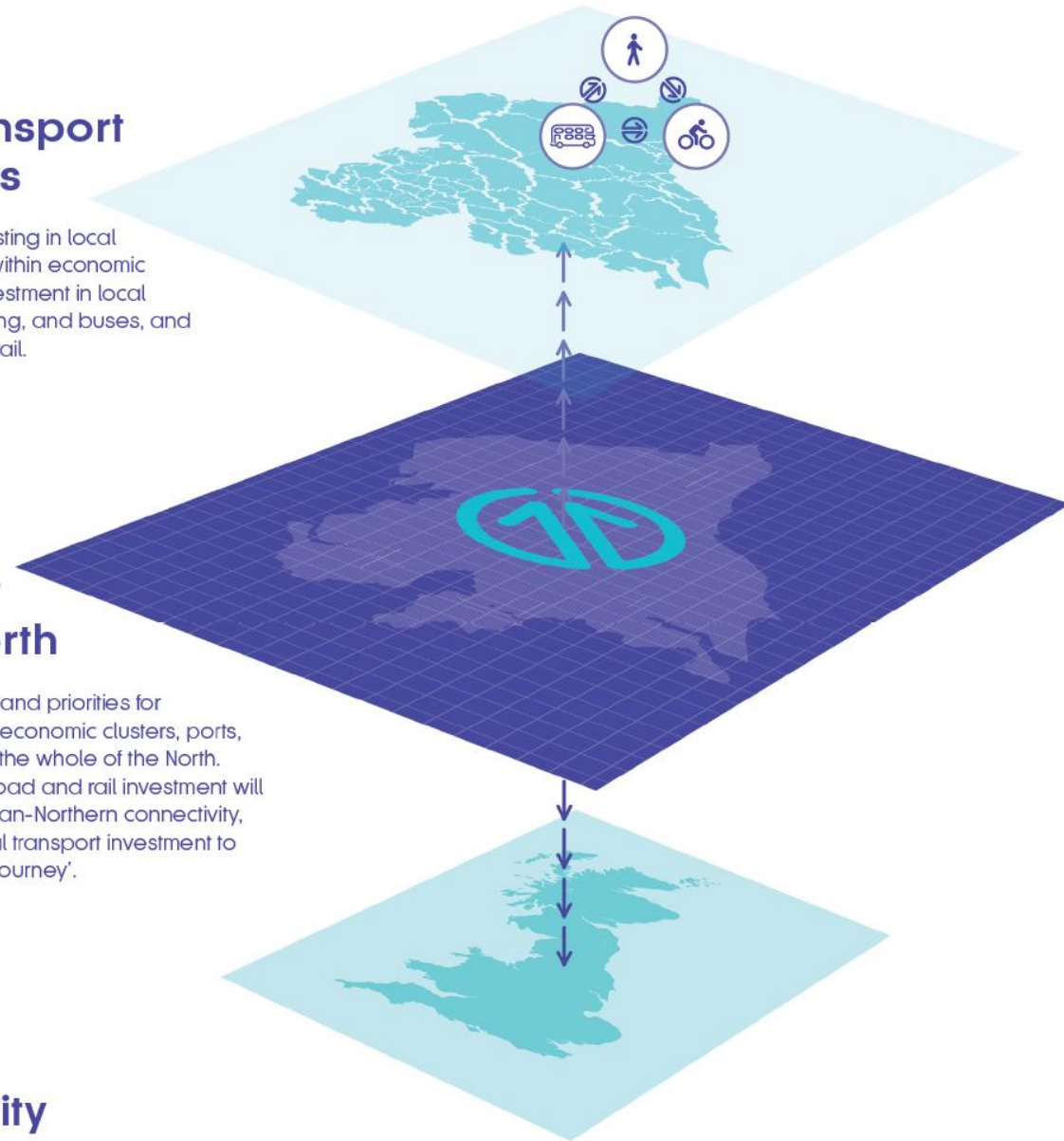
Managing and investing in local transport networks within economic clusters, such as investment in local roads, cycling, walking, and buses, and in some cases light rail.

Transport for the North

Setting out the case and priorities for connecting different economic clusters, ports, and airports across the whole of the North. TfN's 'blue print' for road and rail investment will enhance strategic pan-Northern connectivity, complementing local transport investment to improve the 'whole journey'.

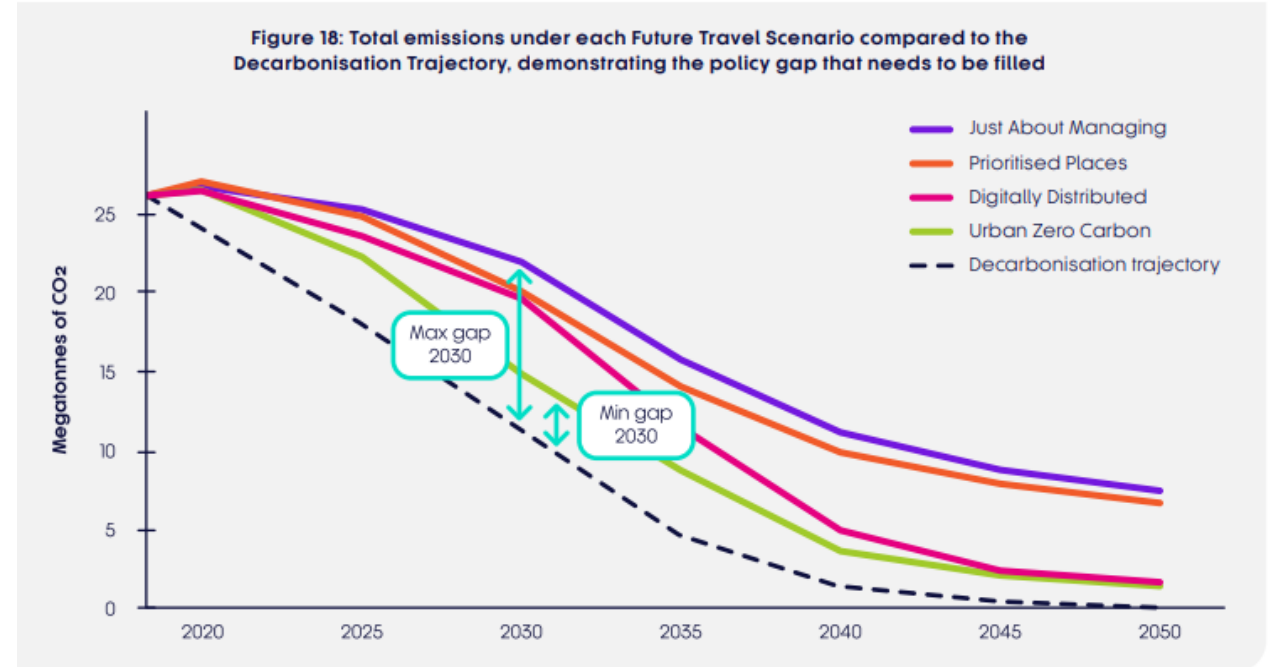
National connectivity

Working with the Department for Transport and the North's cross-border authorities, the pan-Northern investments will support enhanced connectivity across the UK.



Decarbonisation Strategy elements visualised

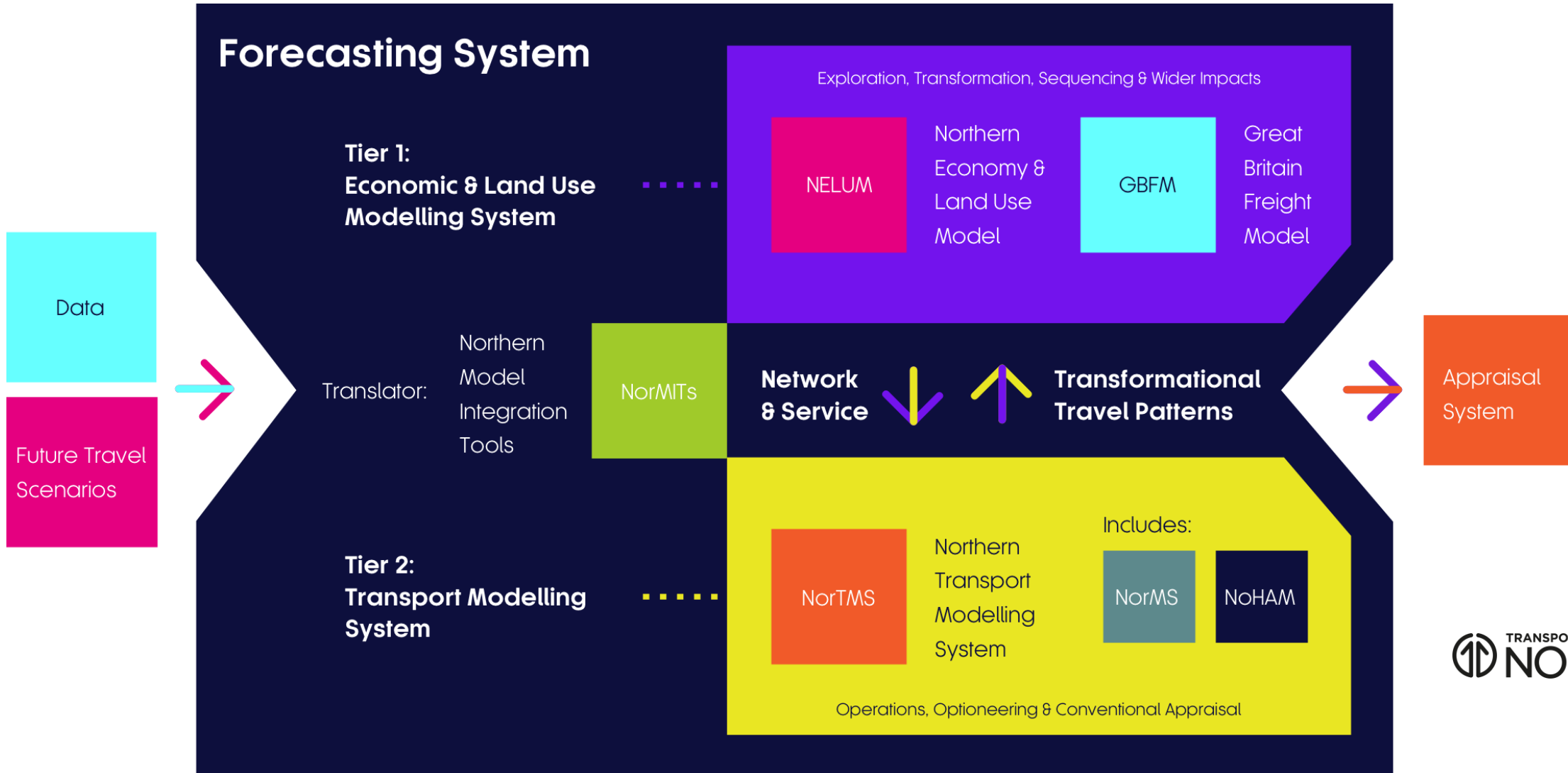
- The **GHG inventory** establishes total in scope emissions in base year
- The 4 **Future Travel Scenarios** set potential baselines, from which further TfN action is required
- The **Decarbonisation Trajectory** sets the level of ambition.
- The **Policy Gap** is a range of potential additional action required, depending on the scenario.



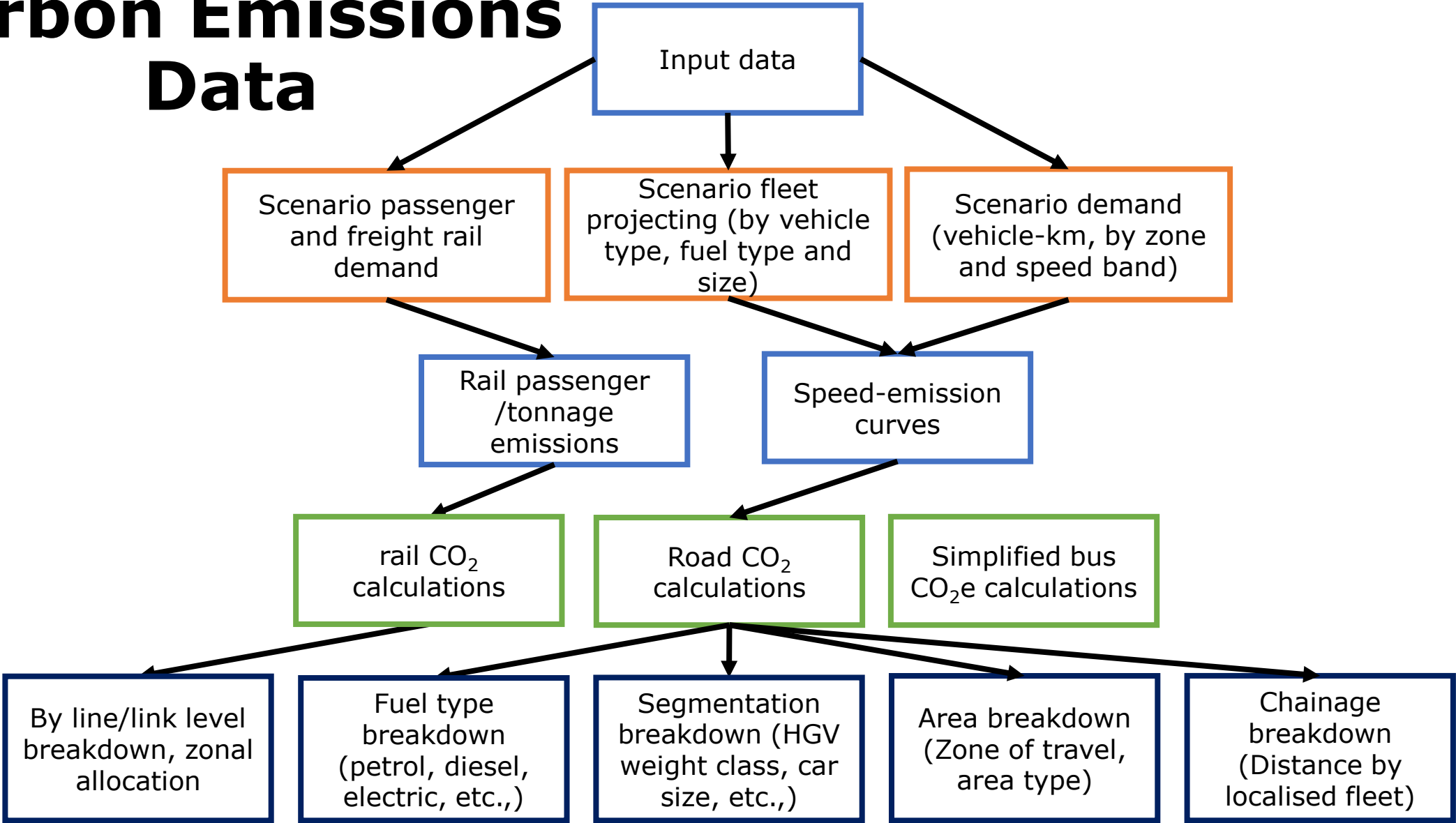
What's TfN doing around Decarb?

- Quantified Carbon Reductions (QCR) Dashboard
- Electric Vehicle Charging Infrastructure (EVCI) Tool
- Clean Mobility Visions
- Decarb Strategy and FTS Refresh

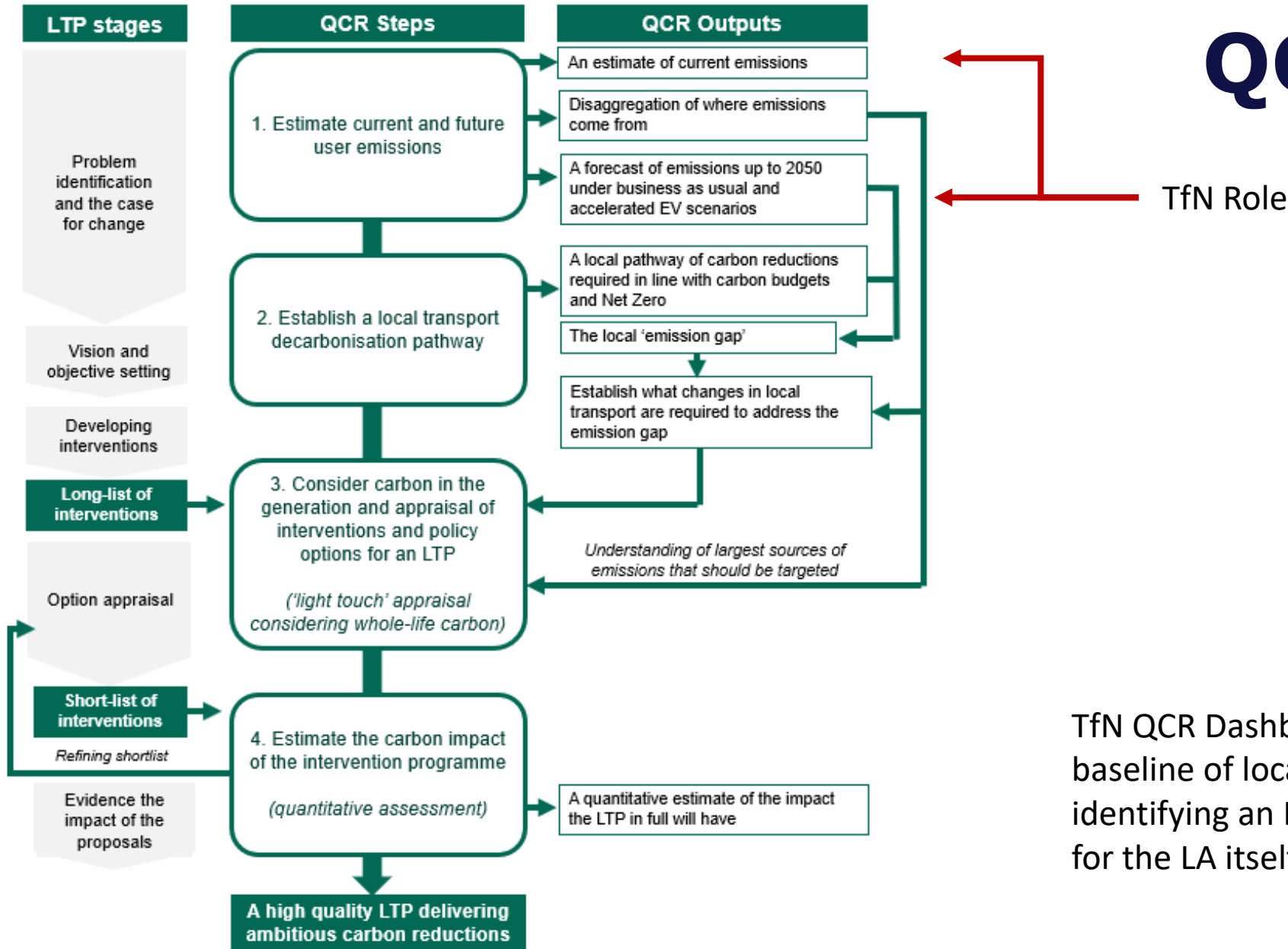
Analytical Framework



Carbon Emissions Data



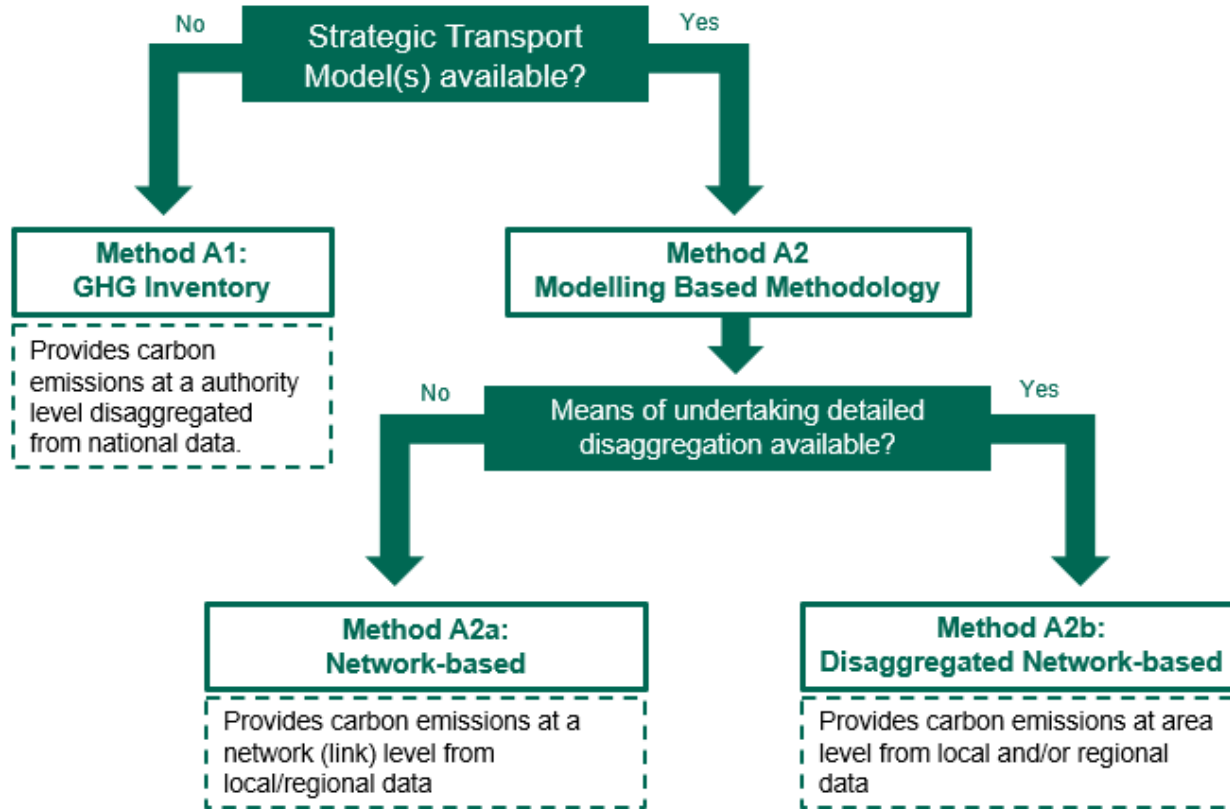
QCR Pathway



TfN QCR Dashboard covers forecasting and the baseline of local authority missions but reserves identifying an LA's necessary policy reductions to for the LA itself.

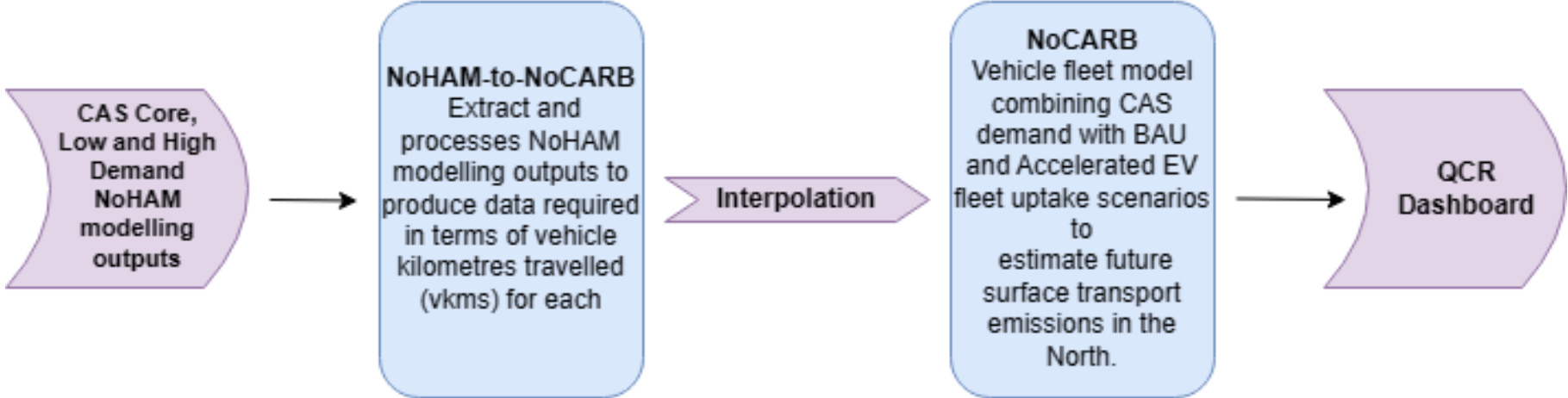
QCR Implementation

Sophistication of approach for each LTP is dependent on resourcing available from STBs and LA/LTAs



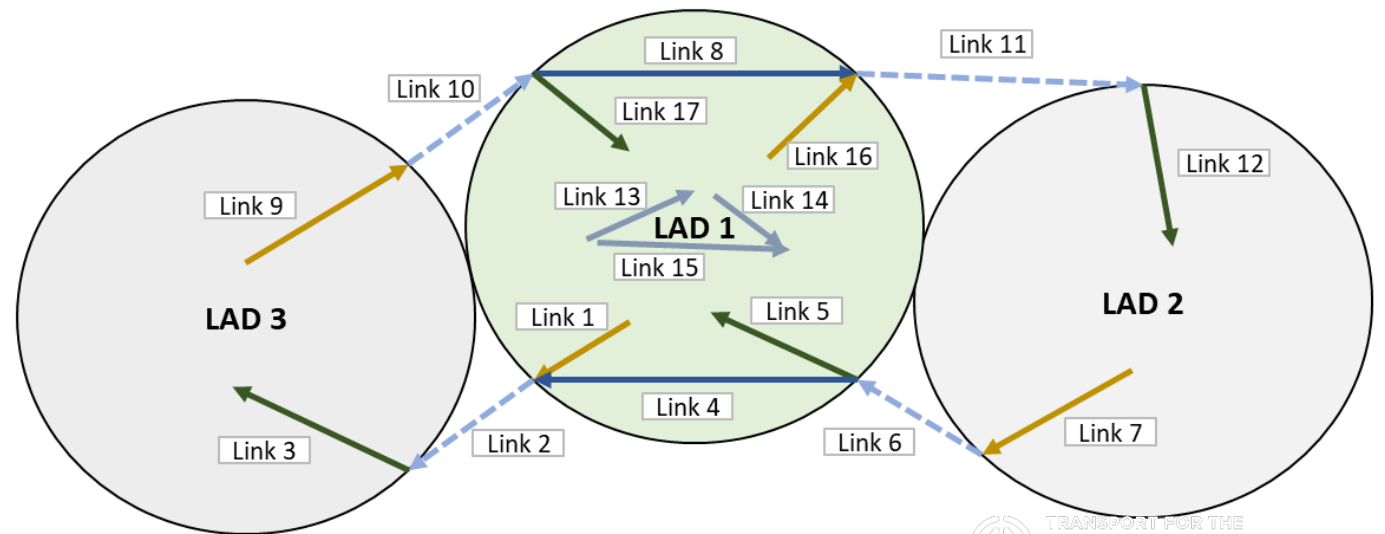
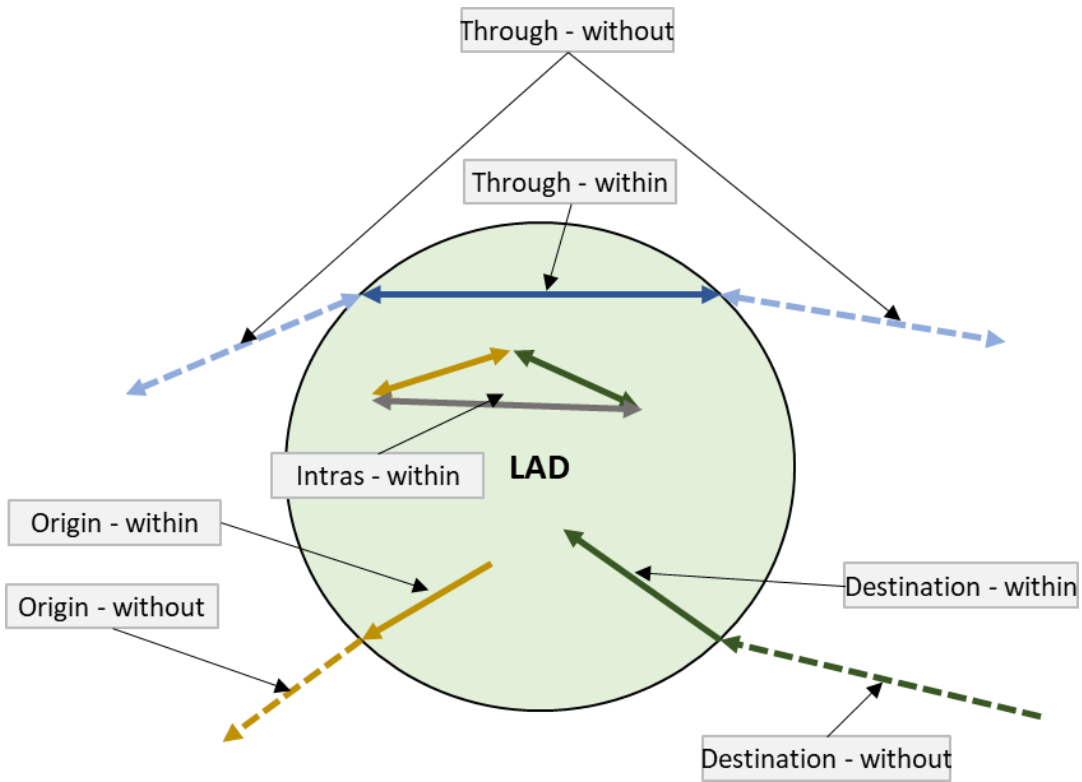
TfN Approach

QCR Implementation



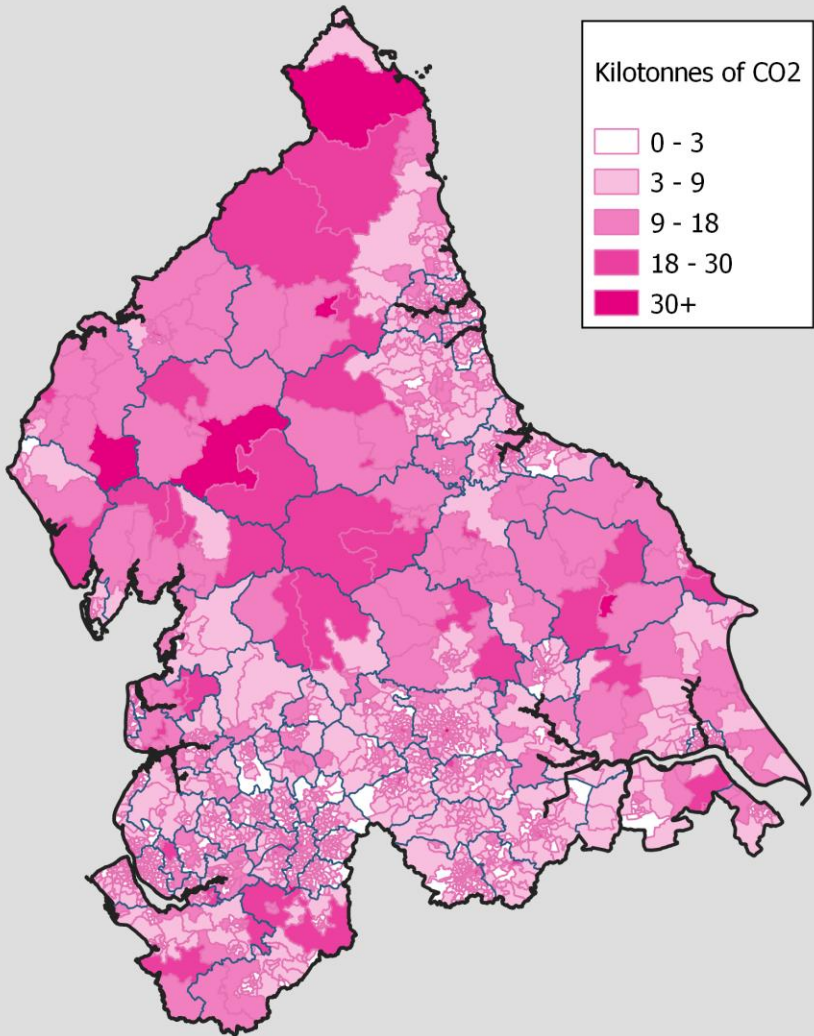
		Fleet Scenario	
		BAU Vehicle Uptake	Accelerated EV Vehicle Uptake
Demand Scenario	CAS Core	SC01 - BAU	SC04 - Accelerated EV
	CAS High	SC02 - BAU High	SC05 - Accelerated EV High
	CAS Low	SC03 - BAU Low	SC06 - Accelerated EV Low

QCR TfN Approach

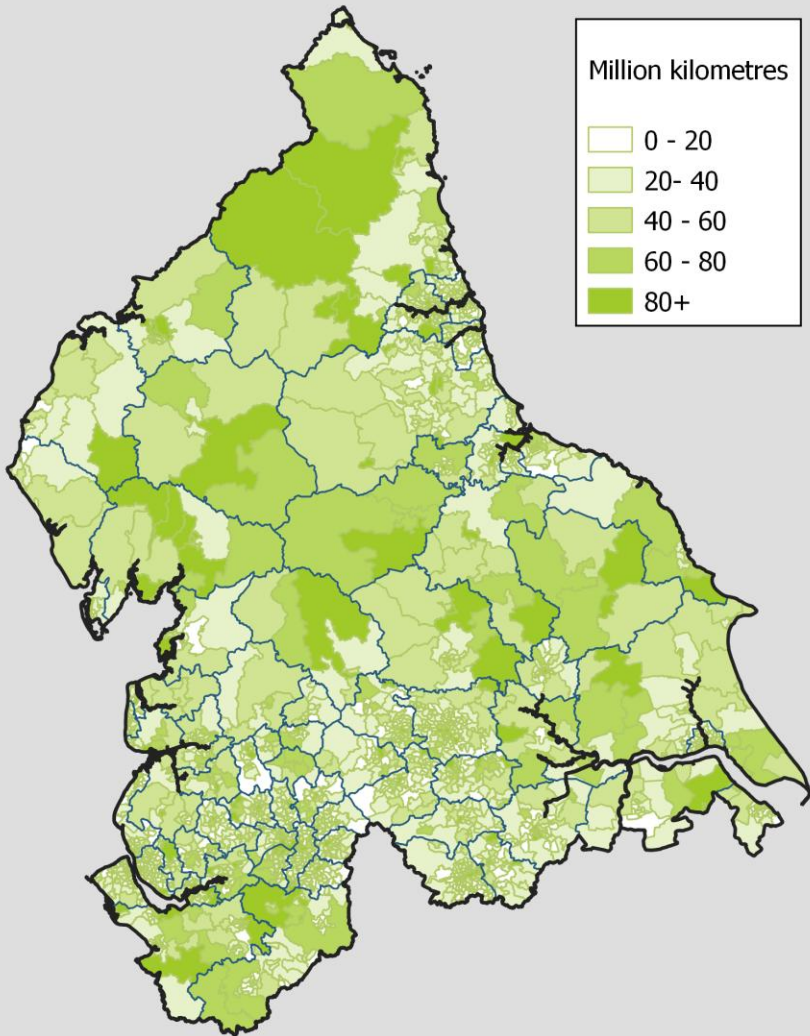


QCR example outputs

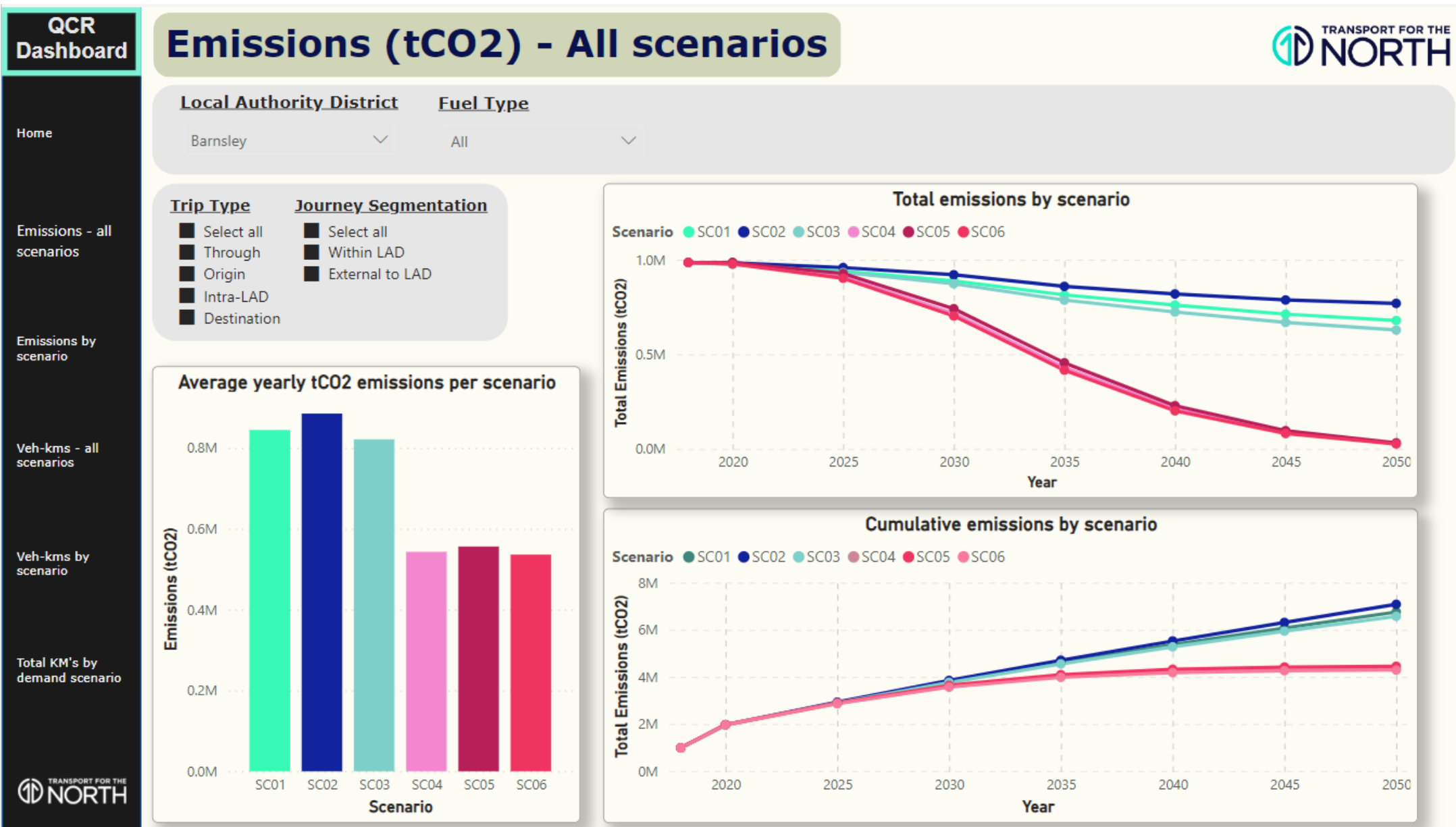
JAM 2030 Emissions Grid and Tailpipe emissions by zone of vehicle origin



UZC 2030 Distance travelled by zone of vehicle origin



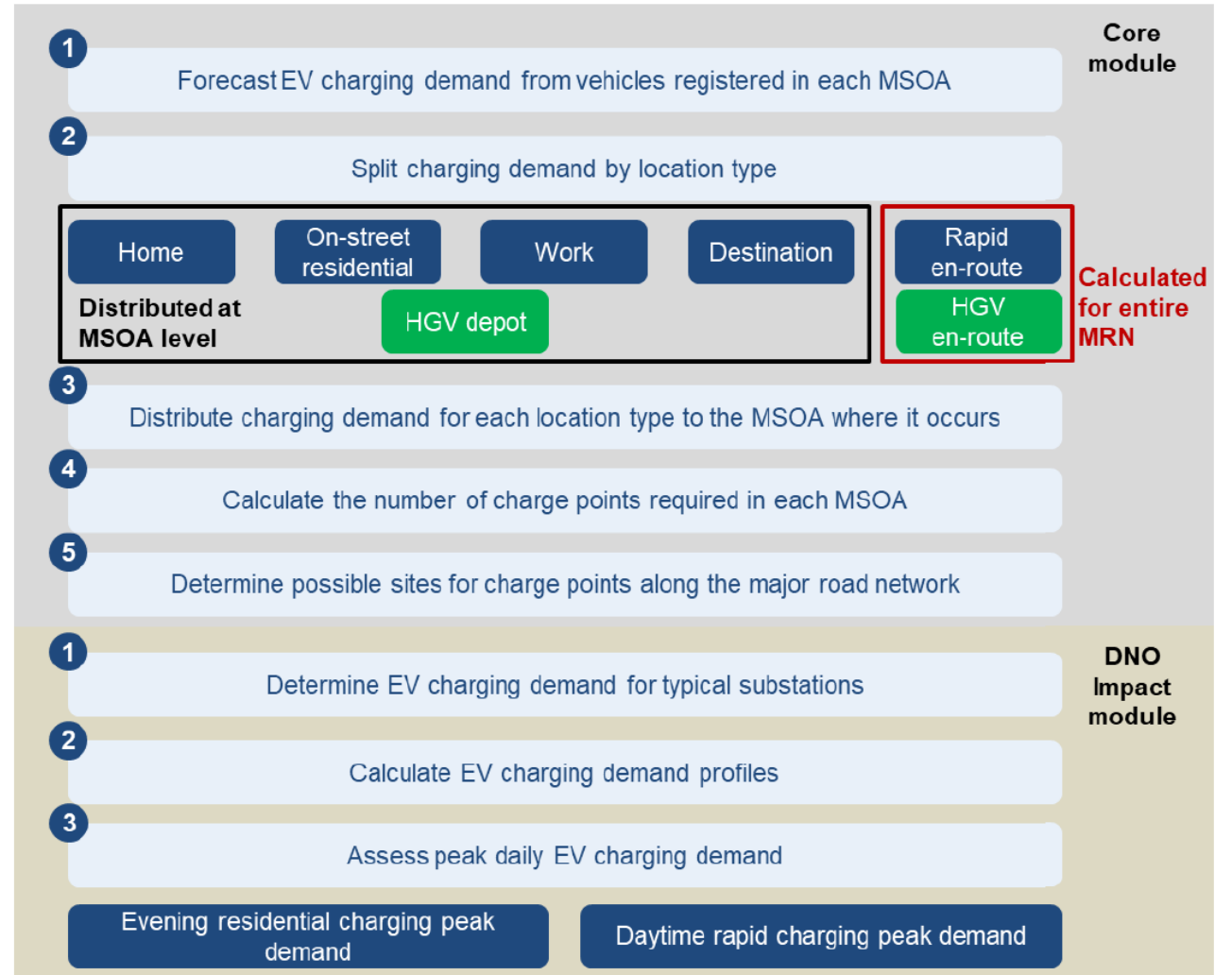
QCR example outputs



[Dashboard](#)

EV Charging Infrastructure tool

- New features and functionality still being added
- Objective is to convert fleet projections and demand data into EV Charging Infrastructure requirements.
- Also uses wider data from TfN models on housing and highway network flows.
- Provides projections of number of chargers needed, per type (fast, rapid, etc.), per MSOA and per Future Scenario.



UDNORTH

EV Charging Infrastructure tool

West Yorkshire Combined Authority Public and Home Charging:

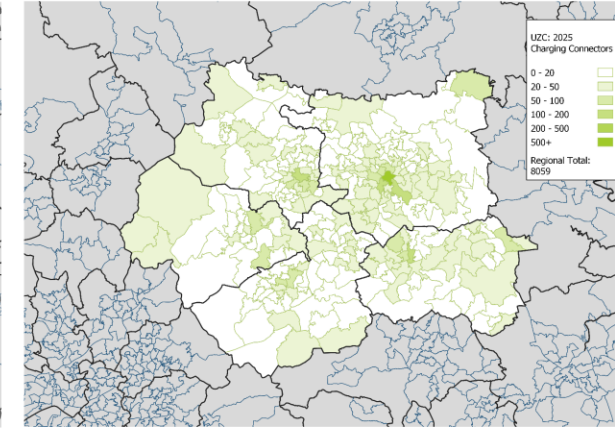
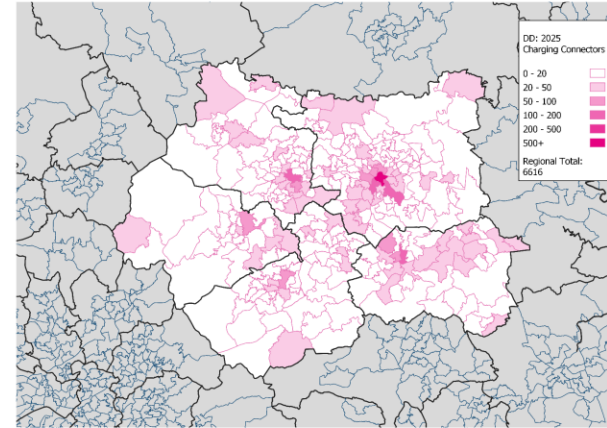
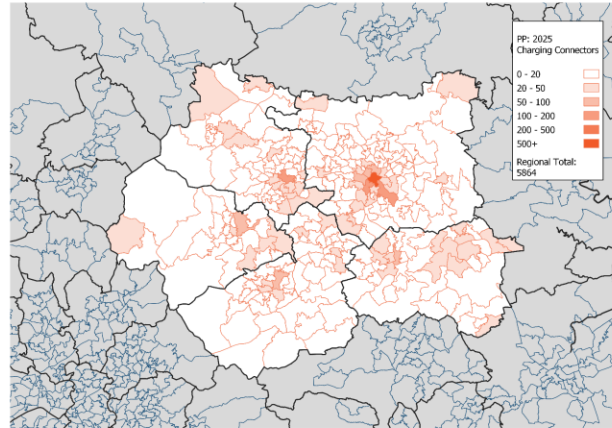
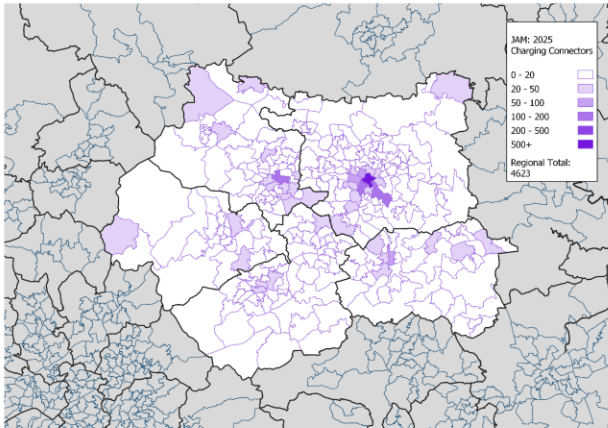
Just About Managing

Prioritised Places

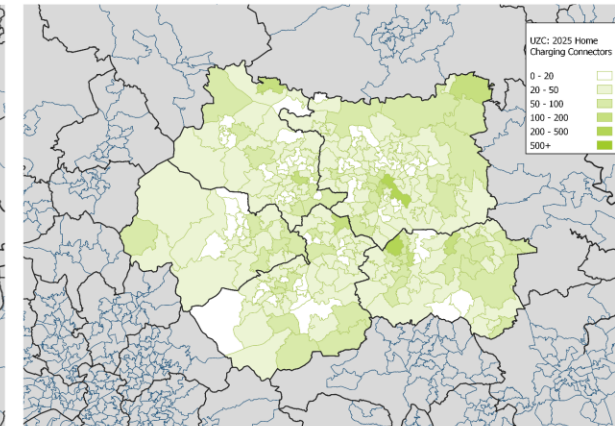
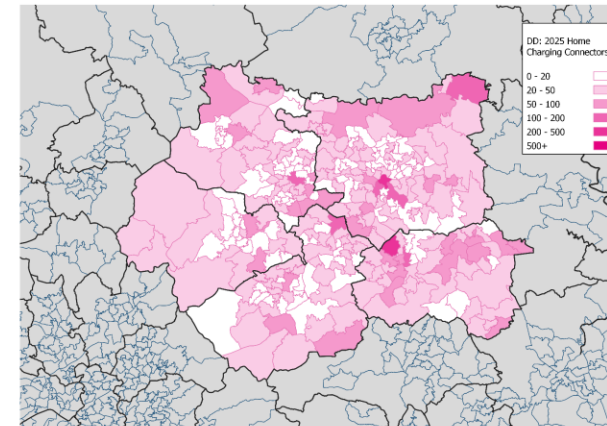
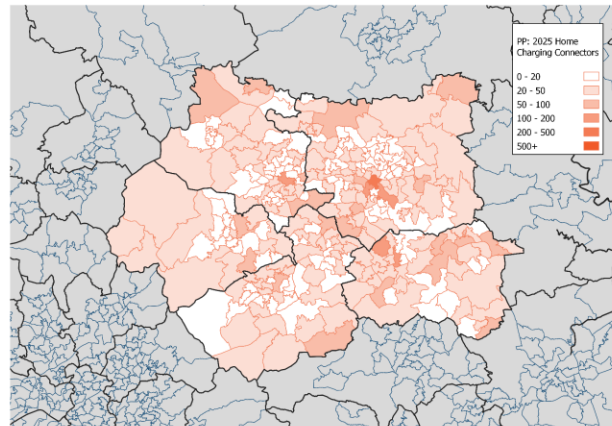
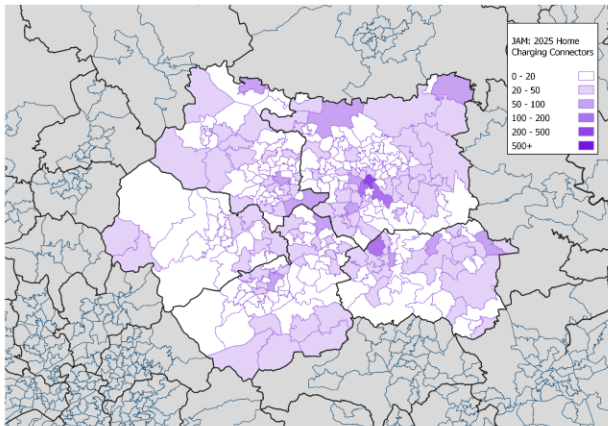
Digitally Distributed

Urban Zero Carbon

Public Charging



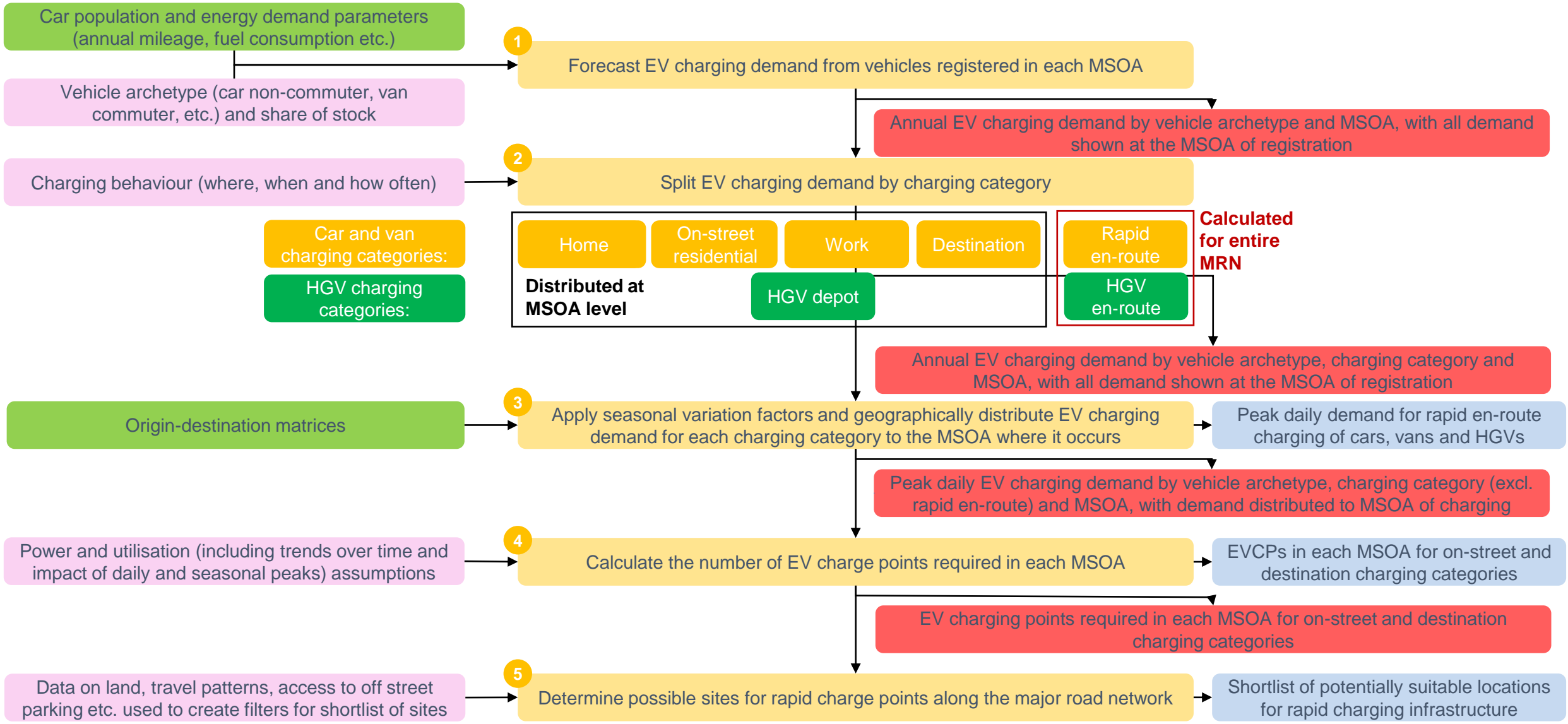
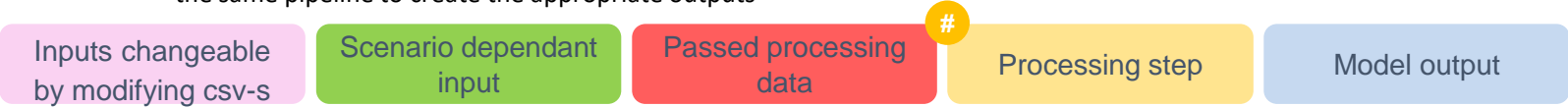
Home Charging



High level Core Module diagram

Legend:

Note: Each scenario and year will be processed through the same pipeline to create the appropriate outputs



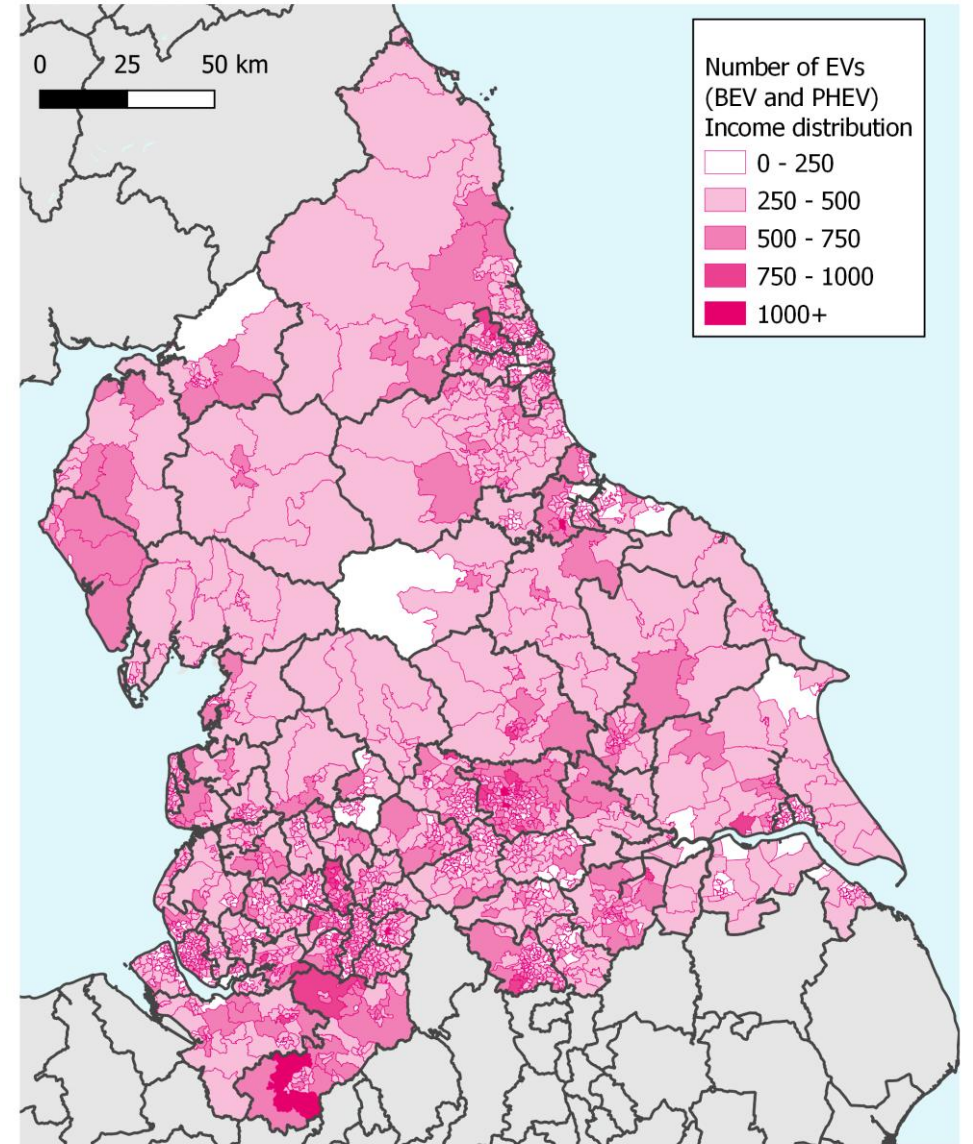
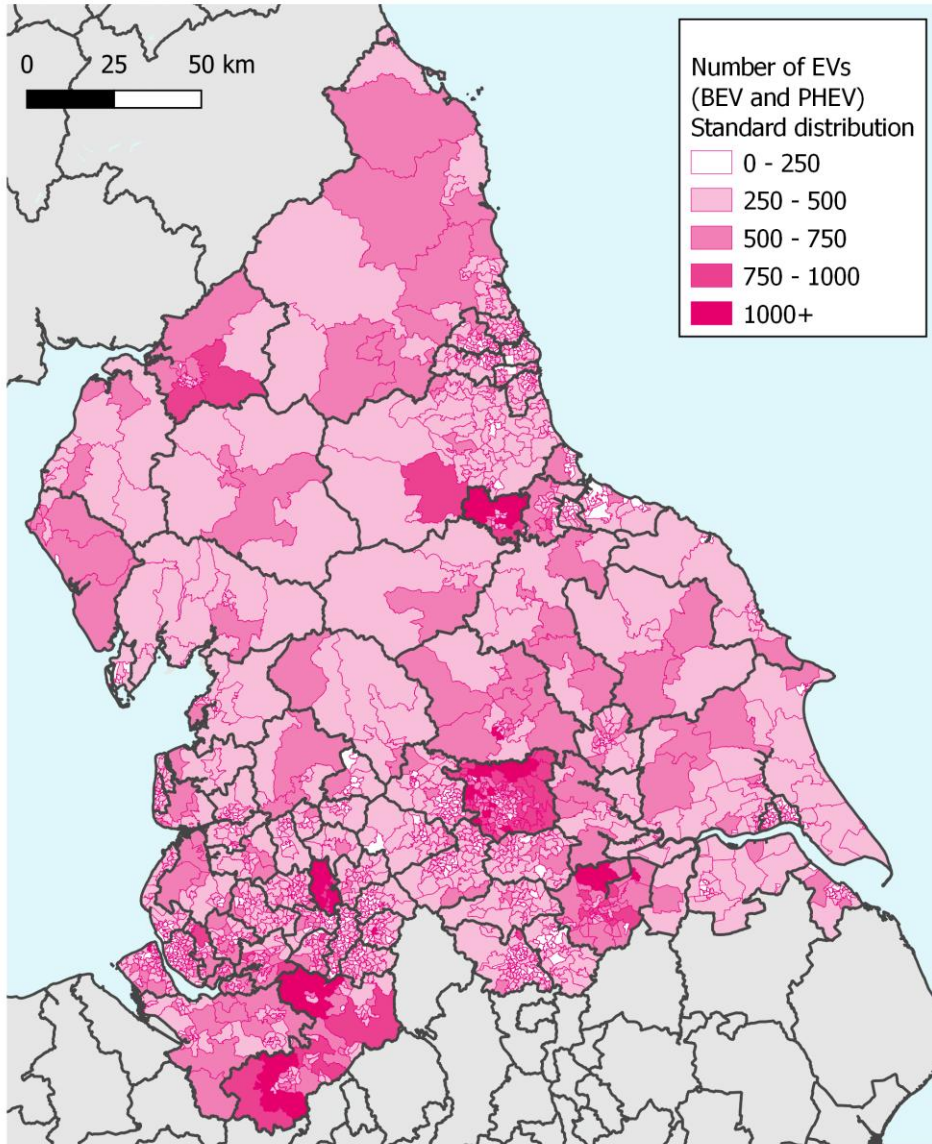
Comparison of fleet distribution approaches and what this can tell us

Displayed on the left is NoCarb's 'standard' distribution.

Displayed on the right is NoCarb's income distribution. Both images depict TfN's Digitally Distributed scenario in 2025.

While the same number of EVs appear in both, the latter shows a condensation of EVs into more affluent areas.

Additionally, there's a regional trend of 'migration' of EVs to the Northwest, and to a lesser extent Yorkshire and the Humber, from the Northeast.



EV Charging Infrastructure tool

Get help/explanation (type term)



TfN EV Charging Infrastructure Framework

Fleet Projection

Default

Income

Analyse

Forecast: EVCP requirements

Year: 2035

Administrative boundaries

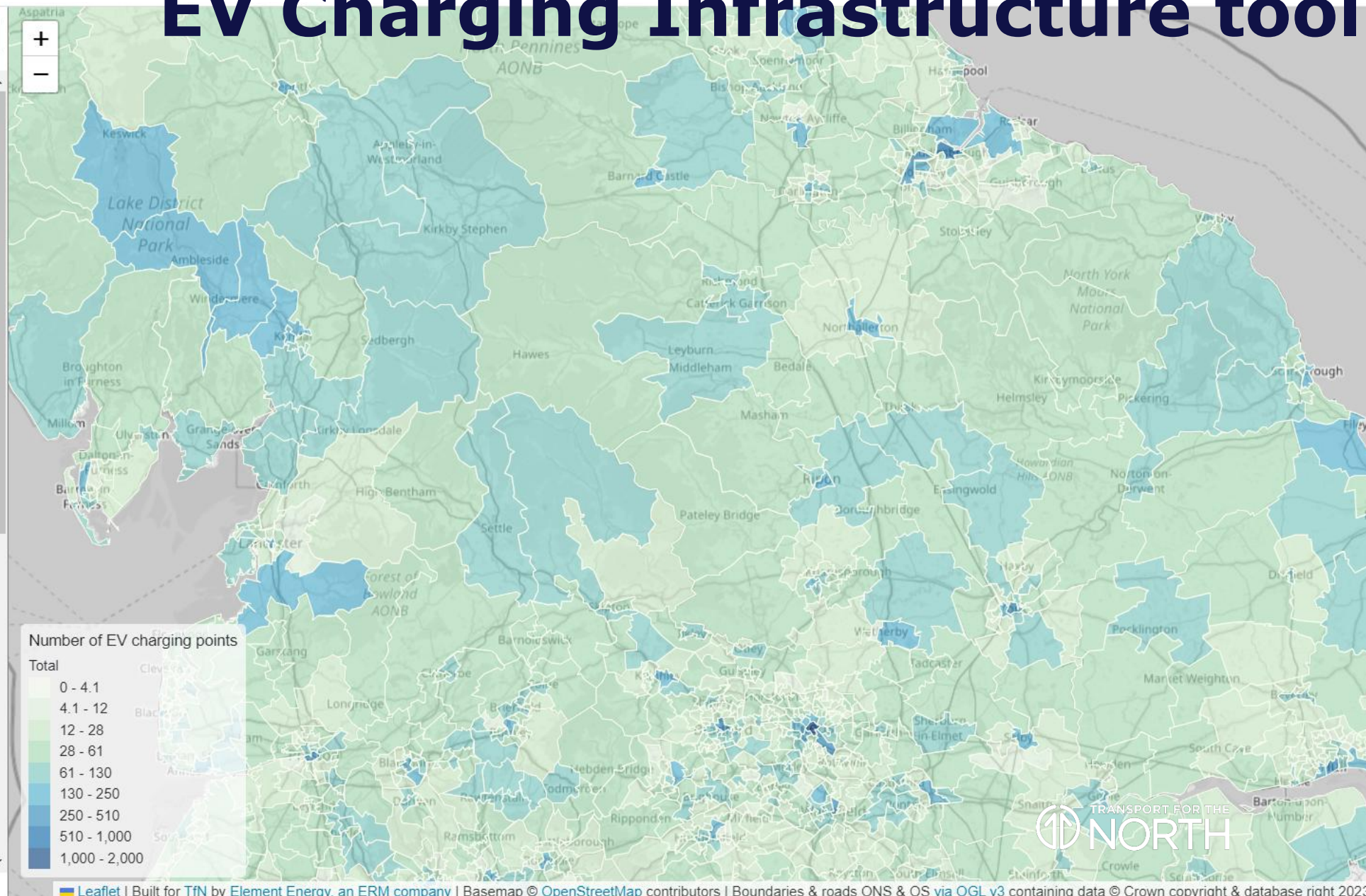
Middle Layer Super Output Area

Travel scenario

Digitally Distributed

Behavioural scenario

[Read about method](#) · [Show terms of use](#)



Thank You

Adam Adamson
Analyst

adam.adamson@transportforthenorth.com

