

# Parcel carrier collaboration – the carrier’s carrier model

Allen\*, J., Bates\*\*, O., Bektas~, T., Cheliotis+, K., Cherrett#, T., Friday\*\*, A., McLeod#, F., Piecyk, M\*, Piotrowska\*, M., Wise+, S.  
 # University of Southampton, \* University of Westminster, \*\* Lancaster University, + University College London, ~ University of Liverpool

## Why should parcel carriers collaborate?

### 1. Financial reasons:

- It may be cheaper to hire a third party carrier than to provide a dedicated service

### 2. Logistical reasons:

- A third party may be better placed to do the work, in terms of availability of suitable personnel and facilities

### 3. Environmental reasons:

- To reduce numbers of drivers and vans operating in same area
- Why have multiple carriers visiting the same people and places each day to deliver parcels?

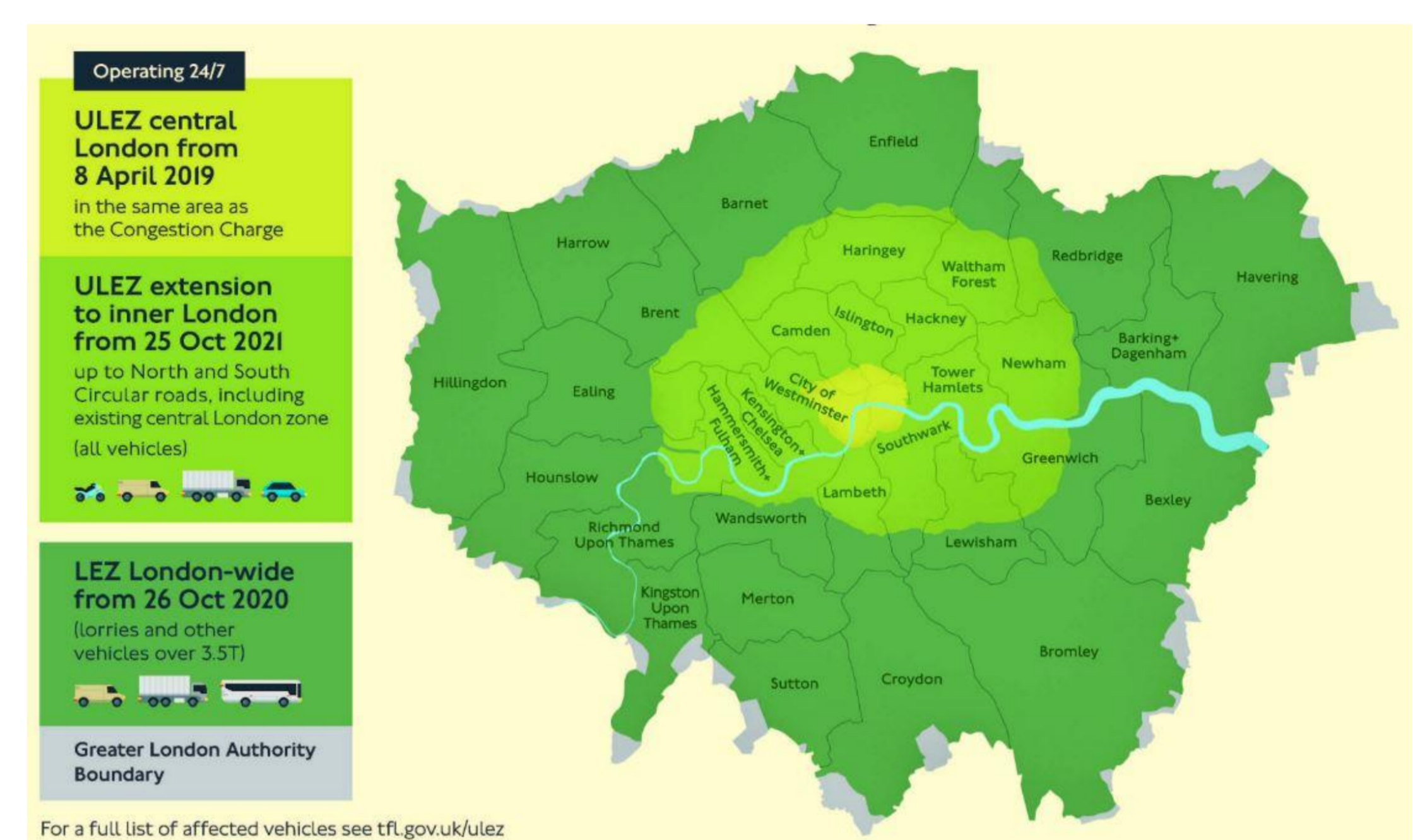


## What are key drivers for change?

**Traffic congestion** affects delivery time and service reliability – average vehicle speed in London is 11kph.

**Restricted access and parking** can make it difficult to reach the delivery address with risk of parking fines.

The impact of **vehicle emissions** on **air quality** is a major concern. Low emissions zones and charging schemes have been introduced and carriers will incur added charges or the cost of upgrading vehicles to meet emissions standards.



Source: Transport for London

## Collaboration in a rural setting

Menzies Distribution act as a carrier for 13 national carriers in the Scottish Highlands, Islands, Grampians and Argyll, with support from several smaller regional carriers.

Collaboration is driven by the need to reduce high operating costs associated with:

- Low parcel volume density: 1% of UK parcel volume delivered to 22% of the UK by area
- Long distances and travel times, some trips with ferry crossings

The operation involves:

- 150 vans across the network, all using diesel fuel
- Average vehicle mileage = 42,000 miles/year
- Inverness hub handles 12-13,000 parcels per day



Source: Menzies Distribution

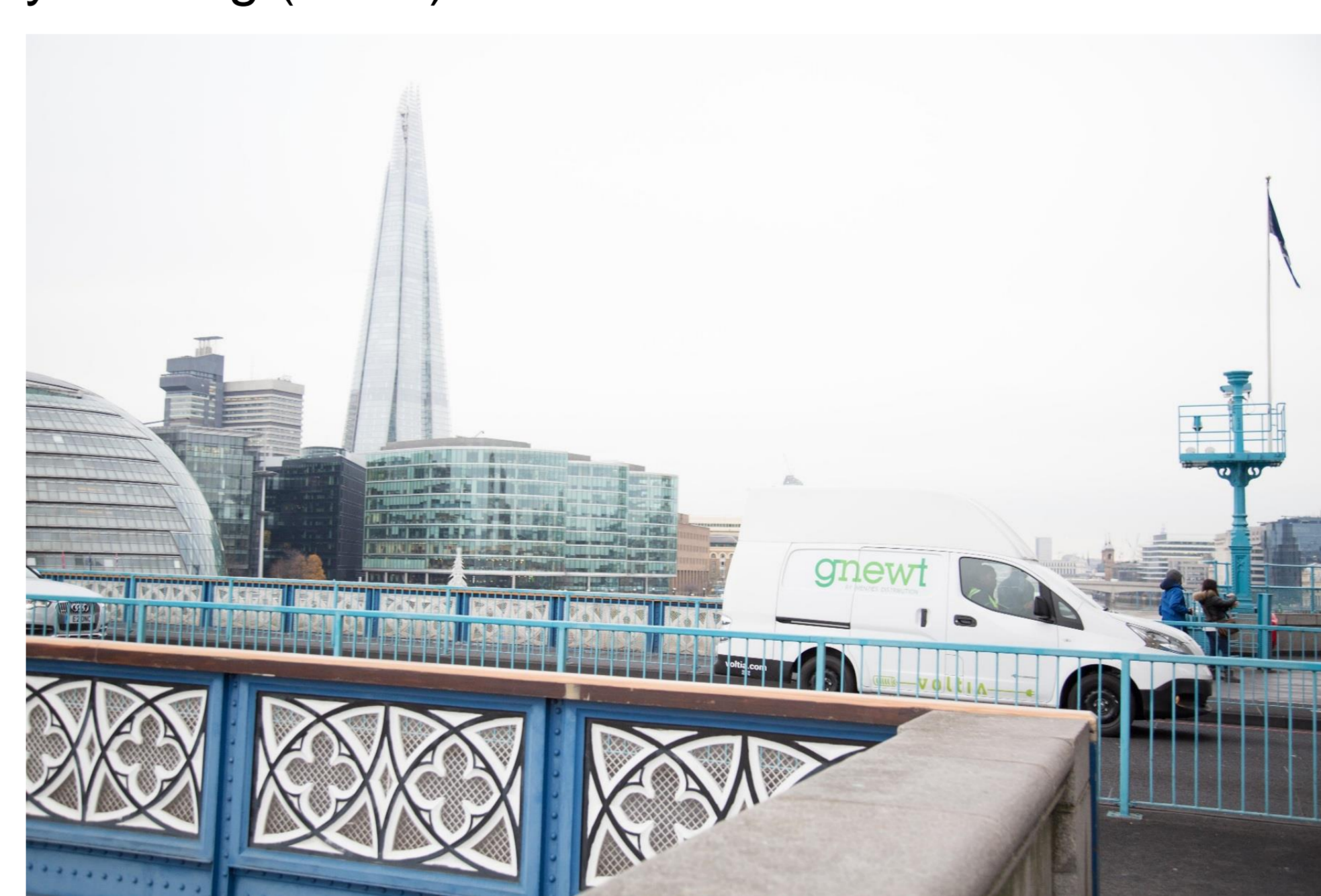
## Collaboration in an urban setting

Gnewt Cargo (now part of Menzies Distribution) have worked as a carrier’s carrier in London since 2008, using an all-electric fleet of over 100 vehicles. Several national carriers employ their services in central London, taking advantage of:

- reduced costs - no congestion or toxicity charges for electric vehicles
- excellent location – depot at Bromley-by-Bow only four miles from City of London

Analysis of before and after operations undertaken on behalf of a national carrier estimated substantial savings in terms of:

- Distance driven (-67%)
- Energy consumption (-87%)
- Empty running (-93%)



Source: Gnewt

Web: <http://www.ftc2050.com/> Twitter @FTC2050 Email: Prof. Tom Cherrett [t.j.cherrett@soton.ac.uk](mailto:t.j.cherrett@soton.ac.uk)

### Academic project partners:



### Industrial project partners:



Engineering and Physical Sciences Research Council  
 Grant ref. EP/N02222X/1