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Department for Environment Food & Rural Affairs

CROSS RIVER PARTNERSHIP
Delivering London's Future Together

Report Summary

WALKING FREIGHT

JUNE 2022

What is walking freight?

Walking freight is a mode of logistics where foot-based porters play a key role in deliveries and collections.

This model has significant potential to expand within London, as it has advantages over other logistics modes which make it an efficient and commercially viable choice in specific circumstances.

Foot-based porters can use different kind of trolleys and bags:

Cross River Partnership has identified and consolidated different operational approaches involving walking freight into the following three typologies:

A **traditional model** where walking freight supports unconsolidated, van-based deliveries

Direct **business-to-consumer** deliveries

A **consolidation**-based model, where walking freight acts as the 'final mile' mode of delivery from a consolidation hub

To inform our full report, we approached several logistics operators to understand their existing trial operations involving walking freight and consolidation in urban areas, barriers to potentially expanding those operations, and the role new technology will play in enabling that expansion. We engaged several operators of varying sizes, all operating within the whole of Greater London:

amazon

charili

dpd

EVRi
The new Hermes

getir
groceries in minutes

ups

urb-it

What were the key findings?

Benefits of Walking Freight

- Goods most suited to walking freight delivery are **small consumer goods and personal deliveries**. These goods comprise a substantial proportion of the overall volume of packages delivered by major operators.
- Walking freight has high potential to **serve the densest areas of the city in particular**, such as the Central Activities Zone (CAZ), Croydon, and the Isle of Dogs.
- Walking freight has the potential to generate benefits for London, mainly due to **reductions in vehicle distances travelled** (from substituting trips usually made by van with trips made on foot, by pedestrian porters). Overall kilometres travelled by light goods vehicles (LGVs) could be reduced by up to 0.4% across Greater London (i.e. one in every 250 kilometres) if walking freight was expanded to its full potential in the CAZ.
- Vehicle access restrictions and lack of plentiful and reliable loading bays already incentivise operators to park their vehicles for extended periods **within close walking distance of groups of addresses**, making the final leg of the journey on foot.
- Consolidation-based walking freight is a relatively **untapped market** and has **strong growth potential**.

Walking freight benefits for London

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Up to 10% reduction in logistics kilometres driven in the Central Activities Zone

Removing more than 20 million kilometres per year

Up to 4.7 kilotonnes per year reduction in carbon emissions

Advancing London's net zero carbon ambition by reducing road miles driven

Reduced air pollution in densest areas of the city

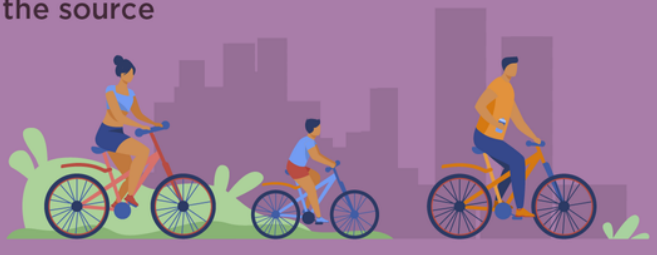
Improving air quality for workers, visitors, businesses and residents

Reduced road congestion and kerbside demand

Enabling smoother journeys for buses and essential motor traffic across the city

Reduced road danger and improved population health

Advancing London's Vision Zero ambition by removing road danger at the source

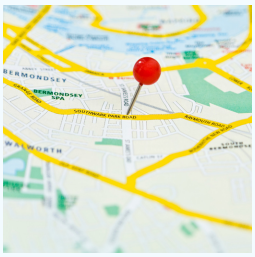


At least £37 million in economic benefits per year (2020 prices)

Boosting London's economy whilst expanding sustainable logistics

Potential for more walking freight?

Size & Volume
High volume, low weight goods are well suited to delivery by walking freight. These goods also comprise a high proportion of operators' overall volumes due to high demand for personal deliveries and small parcels.



Operational Areas
High density, high population, traffic congested areas are best suited to host hub-based walking freight logistics operations.

Trolleys
Power-assisted trolleys allow porters to carry up to 200 kilograms of parcels on foot per delivery round, compared to a maximum of 25 kilograms in a shoulder-slung holdall.

Accessibility
An accessible on-street environment is also an environment that increases the viability of walking freight.

Final Mile
Walking freight would support established 'final mile' modes, such as low emission vans and cargo bikes, to service the densest areas of the city.

Planning & Policy
The public sector needs to 'walk the walk' on logistics planning and policy to enable an expansion of walking freight operations in London.

What were the conclusions?

Potential to Expand

Walking freight has excellent potential to expand in specific markets and geographies within London, particularly through expansion of consolidation hubs employing walking freight as a 'final mile' solution, either on its own or in support of cargo bikes or low emission vans covering a wider area.

Suitable for Lightweight Bulky Goods

Walking freight is well suited to high volume, low weight goods, which includes scope for a high proportion of personal deliveries.

Geographical Areas of Interest

London's Central Activities Zone (CAZ) is well suited to be served by walking freight due to its high workday population and address density, plentiful access restrictions (such as the congestion charge), and high levels of congestion.

Some areas outside Central London are also well suited to walking freight, with Croydon and the Isle of Dogs being located close to the London Road Network (TLRN) and hosting high population and address density.

Consolidation Hubs: Intermodal Solutions

a) Use of Road Network

Consolidation hubs would best be sited close to the Transport for TLRN, to enable larger vehicles to enter London and reach sites with relative ease before leaving the area after unloading their goods to be taken on by foot and/or cargo bike. Certain areas of the city such as Bankside, Aldgate, Marylebone and Pimlico are therefore well suited to host consolidation hubs as they are well served by the TLRN.

b) Use of Waterborne or Rail-Based Logistics

Walking freight could also complement waterborne or rail-based logistics consolidation, enabling 'final mile' delivery of goods into the city from consolidation centres and intermodal sites.

Innovative Technology

Operators have indicated to us they are investing heavily in developing their software technology, as well as innovative new hardware, to increase the competitiveness and viability of walking freight compared to cargo bikes and traditional van-based logistics models.

Barriers to Walking Freight

a) Capacity

Consolidation-based walking freight has attracted private sector interest, but its commercial viability is constrained by high land prices and limited carrying capacity per worker.

b) Existing Laws

Operators are heavily constrained by existing laws banning the use of power-assisted trolleys to carry parcels on public highways in the UK. This has stymied their progress implementing walking freight in London, compared to comparable European cities.

c) Accessibility

Operators also indicated that accessibility is a key constraint preventing walking freight from being as competitive as it could be. Pavements are often constrained in width, and lack dropped kerbs in compliance with the Equality Act (2010), which is a barrier to pedestrian porters moving heavy trolleys quickly and smoothly around the public highway. Improving design guidance for the public realm, as well as for architects and planners designing off-street servicing facilities, would ensure that London is futureproofed to accommodate walking freight.

d) Available Land

Extremely high demand for, and limited supply of, logistics land close to Central London is a key constraint on the feasibility of establishing consolidation hubs which could enable walking freight operations in the CAZ, and other suitable areas of London. Ensuring logistics land is safeguarded and expanded through development planning is essential to providing the right environment for operators to expand walking freight and consolidation operations.

Unlocking walking freight

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Enhance planning policy & skills

- Develop freight planning skills in local authorities
- Safeguard and expand logistics land in Central London
- Harness opportunities to deliver logistics hub space within mixed use developments

Update electric assist laws

- Raise awareness of need to reform electric-assist vehicle regulations with stakeholders
- Revise electric-assist vehicle regulations to allow powered trolleys to operate on public highway

Develop the market

- Trial logistics consolidation space in the Central Activities Zone
- Raise awareness among landlords of the value of logistics consolidation space
- Continue dialogue with logistics operators to understand developing needs

Deliver accessible streets

- Ensure pavements and on-street loading bays are fully accessible
- Ensure servicing arrangements in new developments incorporate foot access

You can read the complete report "Walking Freight Feasibility Study", which was produced as part of Cross River Partnership's Defra-funded Clean Air Villages 4 programme, **HERE**.

Other Cross River Partnership (CRP) resources that might interest you:

- Highways & Footways: Accessibility Guidelines
- Light Freight: Design Solutions for Thames Freight Infrastructure
- Towards Vision Zero: Guidelines to help Local Authorities in the development of Road Danger Reduction Strategies and Action Plans
- The Lived Experience of Our Streets: A People First Vision for London's Streets
- Connect 4 Session 3 - Mitigating the negative impact of road traffic in London: Reduction, Innovation and Legislation

If you would like further information about CRP or anything that has been included in this report, please get in touch:

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