



Cities around the world are already piloting and implementing intersectional, urban freight solutions that, if scaled up or more widely adopted, serve to build healthier and more vibrant communities. Here are some of the most effective and promising examples that are ready to be put in place today.

URBAN FREIGHT SOLUTIONS

Managing parcel volumes

1. Delivery microhubs



Photo: Ville de Montréal/Arrondissement Ville-Marie

Multiple couriers were involved in Project Colibri in Montreal, which used a microhub to shorten the final delivery distance.

Challenge: A new business model for the transportation of goods between producers, distribution centers and consumers is needed, due to population growth and rising land costs, combined with customer demand for faster delivery and increasing congestion.

Solution: **Delivery microhubs** are a type of urban consolidation center located between major suburban warehouses and final delivery destination points.

Why: The additional mid-way delivery point means shorter delivery distances to the final destination, [making a shift](#) to more nimble, low-carbon vehicles such as electric vehicles and electric-assist cargo bikes possible. That shift is necessary to prevent and combat an increase in vehicles, congestion and freight-related emissions, with shipping times now trending towards same-day or one-day shipping and customers more likely to buy fewer items in a single purchase online compared to when they shop in-store, according to research from the University of California.

Taking Action

Identify an available and accessible space

Consider zoning changes and costs of land acquisitions

Define a long-term financial model

Identify the business audience using the service

Develop partnerships with low-carbon courier companies

City spotlights: Yokohama, Japan; Paris, France; Montreal, Canada; London, U.K.

In Yokohama, Japan, a cooperative of 300 shops supported by the Yokohama City Government established a [cooperative delivery system](#) to address congestion and air quality problems in the Motomachi shopping district. The microhub pilot successfully ran from 1999 to 2001 and was made permanent in 2004. Truck carriers deliver parcels to a consolidation center located 1km from the district, where people-powered carts pick up parcels for delivery to shops. Twenty truck carriers have joined the system, paying around US\$1.50 for delivery or pick up of each parcel.

In 2013, Paris opened its first urban distribution microhub called the [Beaugrenelle “logistics hotel”](#). The Beaugrenelle facility is a two-floor 3000m² building where packages under 30kg (66 lbs) are processed for delivery by clean vehicles. With the ability to handle 6,500 parcels a day, it reduced driving distances by 52 percent, noise from delivery vehicles by 8 percent, and cut delivery related CO₂ emissions by half. In 2018, Paris launched a second facility, the [Chapelle International logistics hotel](#), a 41,500m² four-floor urban logistics hub built on top of an abandoned railway to allow for multi-modal consolidation by road or rail. Commercial uses at Chapelle International go beyond logistics and the building includes data centers, offices, sports facilities, and an urban farm. The close proximity of these consolidation centers to residential neighbourhoods required a change in the Paris zoning ordinance to reintroduce commercial facilities from the city outskirts back into the city center.

In Canada, sustainable mobility company Jalon MTL, in collaboration with the City of Montreal, launched a one-year pilot titled [Project Colibri](#) in 2019. The city provided a vacant bus depot to be used as a consolidation space for delivery trucks to unload packages to be delivered by zero-emission e-cargo bikes to their final delivery destination. Five couriers are participating in this pilot including Purolator, one of Canada’s leading courier companies.

In December 2020, the City of London approved a microhub called the [Last Mile Logistics Hub](#) to reduce congestion and emissions in central London. The City will transform 39 spaces in an underused parking garage into a parcel consolidation hub for final delivery by e-cargo bikes. Amazon Logistics was chosen out of 10 couriers in a competitive bid to operate the Last Mile Logistics Hub allowing them to take 85 delivery vehicles off the road each day, which will eliminate 23,000 delivery trips every year. Amazon Logistics will be able to serve all deliveries within a 2km radius of the hub using zero-emission vehicles which covers all of the City of London as well as some parts of the central London sub-region.

For implementation:

- Choose the right drop-off/pick-up location. For greater success, the microhub should be in an accessible building or structure (new or existing), in an area with a high demand for deliveries from businesses and households, and three miles or less from the final destination.
- Land-use designations could limit the availability of feasible microhub locations, which are designated as commercial facilities. In areas designated for residential use with a high volume of deliveries to households, consider a zoning change to enable mixed land use.
- Considerations should be made of land acquisition or rental costs and how that affects the financial viability of the project.
- Running a microhub requires considerations about how it will operate, including its financial model (e.g. public financing or fee-for-use), which company will lead operations, and which businesses can use it.
- The chance of microhub's success increases when courier companies and businesses are involved in its design and operation. Develop partnerships with courier companies that use small clean vehicles to complete last-mile deliveries to collectively advance shared interests and common goals.

