NATIONAL INFRASTRUCTURE COMMISSION

Summary Paper: Urban Freight

20 February 2020

This paper summarises the key themes which were discussed at the sixth knowledge sharing event in the National Infrastructure Commission's 'Next Steps for Cities' programme. This paper has been developed in collaboration with the event speakers and city representatives across the country.

The <u>Commission's Freight Study</u> found that national government and local authorities often had little understanding of why and how to plan for freight. This has resulted in policy makers or planners being unable to take account of, or plan effectively for, the needs of freight.

Boosting the visibility of freight within the planning system

Growing demand for faster, cheaper, and more convenient deliveries means the availability of land for freight distribution centres and other infrastructure is crucial for the efficient operation of the sector and for enabling optimised last mile operations. Plans for new housing and or commercial developments often only reflect consideration of the final delivery of goods, not accounting for the wider supply chain. This, combined with the release of industrial land for nonindustrial uses, has led to a lack of freight warehousing capacity close to new housing developments meaning freight deliveries have to travel further to fulfil this additional demand. Local Authorities need to consider the impact of increased delivery demand linked to new housing in their spatial planning strategies, allocating land to freight logistics and potentially working across county or city boundaries to deliver a joined up approach which meets both local and national needs.

As part of its response to limited land availability, a medieval street arrangement and the future densification of the city, the City of London is taking a proactive approach to reduce the number of freight vehicles in the Square Mile. Their initial estimates are that 50 per cent of current deliveries can be replaced by implementing alternative delivery approaches such as consolidation centres and converting some assets such as underground car parks into 'local delivery hubs'. They have also worked with the freight industry to promote the retiming of deliveries to remove vehicles at times when they are filled with other road users, such as the morning rush hour and lunch times. This has enabled the industry to make more efficient use of its vehicle assets and the City to create additional capacity for active transport users on its existing infrastructure.

One of the reasons for this lack of visibility has been a lack of data about the freight sector. This absence of an evidence base is a problem at a national level, making it difficult for policy makers to understand the movement of freight around the country and develop a strategy for the future decarbonisation of freight. The lack of data has also been an issue at a local level, meaning local authorities have been unable to understand how and where freight travels around cities and the extent to which the sector is contributing to congestion within their region.

The potential of improved movement data has been demonstrated by a University of Westminster study, has already generated new insights into van deliveries. It found that delivery drivers typically stop for eight minutes per item delivered and, on a typical city centre parcel delivery round, travel further on foot than they do in their vans. This research highlighted the potential efficiency and congestion benefits of utilising alternative delivery approaches such as 'human portering', where a person meets a van at the roadside and collects a consignment of

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parcels to deliver on foot before the van leaves to drop off another consignment. If additional data is collected by cities (or made available by freight operators), then these new approaches could be further refined through the use of algorithms and game theory to find additional efficiencies in the delivery schedules.

New Delivery Technologies

Local authorities should work with the freight sector to encourage alternative delivery technologies which can reduce emissions and reduce congestion. These alternative technologies could include 'human portering', electric vehicles and e-cargo bikes.

Currently one of the biggest barriers to the uptake of these alternatives is the distances between the distribution centres and delivery locations. For populous cities an effective solution has been the establishment of micro-consolidation or 'last mile hubs' where all of the packages for the surrounding area are delivered before being delivered by technologies such as e-cargo bikes. Local authorities can help facilitate the uptake of these technologies by ensuring that suitable sites are available close to delivery locations. This could be by preserving existing industrial uses, encouraging a greater mix of land uses in new developments, or releasing some of their own land for distribution hubs – such as the City of London's approach described above.

Local authorities also need to consider the infrastructure requirements for these delivery technologies, such as the provision of EV charging points for van fleets within cities, the space and charging requirements of e-cargo bikes or drop off points to enable 'human portering'. It is also important to note that not all new delivery solutions will be appropriate or effective in every location so local authorities need to carefully consider the impact of these alternatives on existing infrastructure.

Local Authorities working with the freight sector

Achieving shared goals, including zero emission freight and reducing congestion in city centres will require Local Authorities to work with the freight sector. Closer engagement and cooperation will help avoid the perception that the local authority has tried to impose measures on the industry without genuine consultation. This level of engagement is important for when Local Authorities are considering options which either incentivise changes of behaviour, such as grants for new cleaner delivery vehicles or those that look to reshape road use through measures such as clear air zones. Closer collaboration is also likely to avoid unintended consequences of policy interventions, such as daily entry fees which make it cheaper for companies to run two vans instead of one larger lorry.

Through working together, there is also the potential to facilitate the implementation of new delivery technologies such as electric vehicles. An example of this is the UPS electric vehicle depot in Camden where they are looking to offer the local council a new set of vehicle charging services during off peak periods.

Freight quality partnerships, such as the ones operating in North East England and Central London have proved an effective mechanism of bringing together the right people to discuss the prominent freight issues in the local area. These have worked best when they have been set up with a clear and agreed purpose at the start of the partnership. This has led to partnerships considering working on a variety of outcomes including creating safe urban driving courses and best practice guidance for freight operators.

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Changing consumer behaviours

Whilst there is a need for city planners to reconsider the role freight plays within the urban environment, customer behaviour is also a significant driver for change in the sector. The freight sector traditionally responds and adapts to the demands of the customer who may not consider the wider impacts of requesting deliveries at peak times, or demanding next or same day deliveries, which tend to make less efficient use of vehicles and road capacity. The measures outlined above will be more effective if national and local governments and the freight industry works with customers and consumers to incentivise positive behaviours to reduce congestion or improve vehicle loading.