A submission by:

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The Freight Traffic Control 2050 project academic team

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Background

We, the above named academics, are currently working on a project entitled Freight Traffic Control (FTC) 2050 (www.ftc2050.com) which has received funding from the Engineering and Physical Sciences Research Council (EPSRC). Partners in the project include freight transport companies and city transport authorities (including Transport for London). The FTC2050 project is currently investigating several topics that should be considered by authorities when developing integrated urban traffic management strategies to address and mitigate congestion which specifically tackle urban freight issues. These include to:

- Work with freight carriers to study their current operations in London and to quantify the geographical patterns and extent of driving and walking on vehicle delivery journeys.
- Identify the key issues and difficulties associated with these freight transport operations from public and private sector perspectives.
- Develop new computational approaches that can enhance vehicle and walking routeing and scheduling decision-making, and to demonstrate its potential effectiveness.
- Analyse what will happen to the efficiency of these vehicle operations and their negative traffic and environmental impacts if they are subject to slower vehicle speeds and more unpredictable journey time reliability in future.
- Trial and evaluate new methods of carrying out these deliveries that involve consolidation, including the use of walking porters to receive parcels at kerbside and carry out deliveries on-foot.
- Investigate using a ‘carrier’s carrier’ for last mile distribution where one carrier hands over goods to another to make the final deliveries using cleaner vehicles, in order to consolidate goods onto fewer delivery vehicles.
- Evaluate whether the logistics industry will be able to implement more efficient and sustainable operations in the face of pressures that include reducing road space allocation, slower vehicle speeds and logistics sprawl, or whether it will be necessary for a third-party ‘Freight Traffic Controller’ (which could be a private organisation or a city authority) to aid the management of vehicles over the urban last-mile for the more equitable and efficient use of road and kerbside space and time.
We have responded below to the Corporation’s requirements for new developments in relation to the management of freight and servicing in the City of London as detailed in the Consultation Draft. Our evidence comes from the work we are undertaking as part of the Freight Traffic Control 2050 project.

General comments on the Freight and Servicing Supplementary Planning Document - Consultation Draft

Whilst we support the points made in the Consultation Draft, it would have more impact going forward if the requirements were made more stringent, so that rather than offering guidance and recommendations which are ‘strongly encouraged’, ‘should be considered’ etc. these were made compulsory with monitoring and enforcement. Without a greater degree of compulsion, the longer term impact of the document on the sustainability of freight and servicing operations in the City of London remains uncertain, with companies that wish to ignore the recommendations being free to do so in most cases (unless subject to a compulsory Delivery and Servicing Plan (DSP) or Construction Logistics Plan (CLP)).

FTC 2050 research into the parcel sector in central London has shown that walking is an intrinsic component of the job of delivery personnel. In the operations studied, drivers used vans to drive short distances between stopping locations, but then walked to two different receiver’s buildings with their parcels at each stop on average. The vehicles spent approximately 60% of the total journey time parked at the kerbside while the driver unloaded, sorted and delivered the parcels on-foot. The average horizontal distance walked by a driver on these multi-stop vehicle journeys was 8 kilometres (i.e. 5 miles - and this did not account for the vertical distances travelled climbing and descending staircases). Walking accounted for approximately 30% of the total journey distance travelled from the depot, with 95% of vehicle stops taking place on-street at the kerbside. The average driving time between vehicle stopping locations was approximately 4 minutes, with an average 8 minutes kerbside parking time at each vehicle stop. These delivery personnel could therefore as easily be termed ‘walkers’ as ‘drivers’. This gives rise to considerations about alternative methods by which this work could take place that would reduce road traffic and kerbside parking.

Work being carried out in FTC 2050 is suggesting that new methods of computerised vehicle routing and scheduling could play an important role in improving the efficiency and sustainability of delivery operations involving lighter goods and light goods vehicles in dense urban areas such as the City of London. Similarly, delivery portering systems also offer great potential to reduce vehicle kilometres and kerbside dwell time by delivery vehicles in the City, as do the use of micro-consolidation centres and mobile depots. These solutions (portering and micro-consolidation centres) would require the Corporation to assist in the provision of adequate, affordable freight infrastructure. At the kerbside, portering systems would require stopping areas which might entail a review of current waiting restrictions, and facilities such as vehicle loading bays, together with small reception facilities that would provide secure storage for incoming and outgoing goods. It is planned to trial a human portering system as part of the FTC2050 project to quantify the vehicle time and distance savings that could be gained, and to investigate the portering costs and service reliability.

A key area that requires attention is the issue of land use and freight transport, and the role it can play in helping to achieve efficient, sustainable freight transport operations. This can encompass: i) strategic design-making and safeguarding of logistics land in London to reduce vehicle stem mileages and hence freight activity becoming ever-more intensive; ii) the provision of appropriate road freight infrastructure on the road and at the kerbside that helps meet the demand as efficiently and sustainably as possible, iii) improving freight trip generation assessment capabilities in the Corporation (and in TfL and the London boroughs more widely).
The effect of freight consolidation is that the same quantity of goods and services can be provided within an urban area with the use of less freight transport activity (vehicle km, journey time, fuel consumption, kerbside space and time etc.). Consolidation can be achieved by additional methods to those discussed in the Consultation Draft (use of consolidation centres, and collaborative procurement) and at many different locations in the urban supply chain. There is a hierarchy of consolidation facilities based on different urban locations that can serve different types of goods and service flows. These locations can be used to support a variety of different consolidation approaches including: Urban Consolidation Centres, micro-consolidation centres and mobile depots, kerbside consolidation using portering systems, and internal logistics/concierge systems and collective procurement to achieve consolidation in large multi-tenanted buildings.

In addition, through operational collaboration, freight transport operators can facilitate goods consolidation upstream in their supply chains to reduce vehicle trip generation prior to its last-leg despatch to/within the urban area, with companies working together to share their work for given geographical locations. The latter requires engagement with freight transport operators in addition to businesses receiving goods and services in the City. It is also important to note that much consolidation of goods already takes place in freight operations such as retail, and hub-depot flows in the parcels sector.

There are several factors that the FTC 2050 project has identified and is researching that are resulting in an intensification of freight transport operations in London, which are summarised here:

i) The reduction of on-site storage space in retail stores and offices over time (as noted in the Consultation Draft) as a result of rising land values, has led to smaller, more frequent deliveries and thereby more intensive freight transport systems.

ii) The relative price of freight transport compared to other logistics costs, together with the under-pricing of delivery services by ecommerce retailers in their effort to gain market share, resulting in the imposition of external costs on the road network, society and environment.

iii) Consumers’ desire for the ever-faster response times offered by ecommerce retailers is also leading to a rapid growth in less sustainable freight transport operations – as seen in, for instance, hot meal delivery services (with one meal delivered per transport journey – by car, motorbike or bicycle).

iv) The lack of availability and affordability of logistics land in London, especially in central and inner urban areas, is also leading to a reduction in the sustainability of some freight transport operations. The Corporation should take urgent steps to investigate these sources of freight transport intensification that threaten to undo good work carried out to improve freight sustainability, and then take appropriate action to limit their impact and growth.

The Consultation Draft is concerned with the Corporation’s relationship and engagement with businesses based in the City of London that receive goods and services. Many of the ideas outlined above, and which have the potential to generate even greater impact in terms of improving the efficiency and sustainability of freight transport operations, require engagement with a far wider range of supply chain partners other than receivers of goods and services. These include freight transport operators, service providers, shippers, and retailers. There is also an important role that the Corporation can take in advising and educating those working and living in the City of London about the impact of the freight transport and delivery decisions that they take when ordering and purchasing goods and services, and promoting changes in these people’s behaviour in order to reduce freight transport intensity and its undesirable impacts.
It is also important that the Corporation thinks beyond the intensity and sustainability of freight and servicing operations provided to buildings in the City of London. Given the cost of land in the City of London and central London in general, many of these freight and service vehicle trips originate from depots elsewhere in London or outside the capital, and the warehouse used to store these goods and parts prior to delivery in the City of London are also stored elsewhere. As a result, other London boroughs suffer much of the negative impacts associated with these vehicle trips that provide goods and services to businesses and residents in the City of London, and the Corporation should take consideration, and potentially responsibility, for the negative traffic and environmental consequences that result in the provision of the goods and services required within its boundary. This issue could be addressed through closer working between the Corporation and other London boroughs to improve the traffic and environmental sustainability of freight and service transport across the whole of London, rather than individually within their own political and geographical boundaries.

**Specific comments on the Freight and Servicing Supplementary Planning Document - Consultation Draft**

**Paragraph 63:** the requirement to achieve freight consolidation should perhaps come before the discussion of using out-of-town consolidation centres, as out-of-town consolidation centres are simply one means by which the consolidation of goods can be achieved, and will not be suitable for all supply chains and product types. Further relevant publications about urban consolidation centres and their associated operational issues can be provided if desired.

The use of the term ‘out-of-town’ in relation to consolidation centres may be somewhat misleading given that at the start of the paragraph it is stated that the consolidation centre should be in Greater London.

**Paragraph 64:** Micro-consolidation centres are being investigated in the FTC 2050 project, and results can be provided to the Corporation when available if desirable. The organisation producing the DSP may well not be aware of the specific routing to be used, as this will be decided by a freight operator once the scheme is in existence – so may not be appropriate to request as part of the DSP submission. Also, the vehicle type to be used may not be known at the time of writing the DSP – the key point should be the requirement of the use of cleaner vehicles. Obtaining suitable sites for micro-consolidation is likely to prove challenging in the City of London given the limited land available and its cost.

**Paragraph 65 (and 79):** In terms of personal deliveries to workplaces, the FTC 2050 academic team are unaware of the necessary research having been carried out to demonstrate that this is definitively the most sustainable and efficient solution to the problem of online shopping. There is a need to study the range of e-commerce delivery systems (to home, to locker bank, to collection point, and where these should be located – near home or work – and to workplace either direct or to nominated carrier for final movement in a consolidated load) before it is possible to determine the best solution.

**Paragraph 67:** The reduction of on-site storage space in retail stores and offices over time, as a result of rising land values, has led to smaller, more frequent deliveries and thereby more intensive freight transport systems. Therefore the provision of adequate on-site storage space for goods is a positive step. However, is greater compulsion than encouragement possible and could the Corporation play a role in providing shared storage space?
**Paragraph 70:** Does the Corporation therefore have a ‘quiet delivery agreement’ and what does a ‘commitment to minimise noise and pollution impacts’ mean in practice? It would be useful if these points were clarified in the Guidance.

As commented on in relation to paragraph 64, it is likely to be difficult for the developer to know details of delivery and servicing timings and their management to minimise noise impacts at the point of submitting the DSP.

**Paragraphs 71-74:** It is not clear what powers, if any, the Corporation can use to ensure/enforce these preferred delivery times and booking systems. The same is true for vehicle routing guidance (72); vehicle selection (73); and vehicle and driving standards (74).

**Paragraph 75:** It would be useful to include guidance on measures to ‘ensure that the movement and safety of pedestrians, cyclists and other road users is not adversely affected and there is no adverse impact on the amenity of nearby residents’ if they are available. In terms of engine-idling – is any restriction/enforcement possible?

**Paragraph 76:** At present, the monitoring and enforcement of DSPs in London is weak. The Corporation could take a lead in insisting on the submission of monitoring reports, and the enforcement of infringements of DSP agreements in London.

**Paragraphs 77-83:** The Corporation could consider applying a requirement to consolidate deliveries of goods inward to small and medium sized office developments as well as larger ones – again this would lead the way in London and nationally. Compulsory internal logistics/concierge systems should be considered by the Corporation for large multi-tenant (and single tenant) buildings without plans for such operations. This would remove the need for delivery drivers to travel upstairs and goods lifts to make deliveries to tenants inside the building, while their vehicles occupy kerbside or off-street space and affect road vehicle traffic flow. Instead, these drivers would make their deliveries to staff employed by the building in the loading bay/door, thereby allowing the drivers to depart quickly and free up parking space for other road users.

**Paragraphs 84-94:** Considerations concerning compulsory internal logistics/concierge systems should also be given by the Corporation for retail operations, the hotel and hospitality sector, residential and student accommodation. Similar consideration should be given to any other larger buildings that currently require drivers to penetrate the building to find the consignee and make deliveries including public sector buildings, healthcare facilities and educational establishments.

**Paragraphs 95-98:** The Corporation needs to ensure that adequate monitoring and enforcement of Construction Logistics Plans (CLP) takes place.

**Paragraph 99:** As explained in responses to paragraphs 76 and 95-98, the Corporation of London could take a lead in London, and nationally, in insisting on the submission of DSP and CLP monitoring reports, and the enforcement of infringements of DSP and CLP agreements. In addition, the Corporation should consider the application of DSPs and CLPs to smaller sites subject to development, as well as to existing buildings.