

## COMMISSION ON TRAVEL DEMAND

### CALL FOR EVIDENCE: UNDERSTANDING CHANGING TRAVEL DEMAND

Response by the Freight Traffic Control 2050 project partners

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#### **Changing logistics patterns and the implications for travel demand**

*Which aspects of travel demand have changed in ways which have not been anticipated by traditional forecasting approaches in the past twenty years?*

**On-line shopping is growing at around 10-12% per annum generating more small van trips and is being fuelled by:**

- New demand: An ageing of the population
- Older people discover the convenience of internet ordering
- Young people used to internet and remote ordering by the internet (42% of 18-25 year olds use e-retail as their preferred medium)
- Traditional shopping (bricks and mortar) is hit by the economic downturn and the competition of online shopping: number of shops reduce
- Certain goods, such as groceries which only have a small relative online presence, will increase, considering the above mentioned factors
- The use of smart phones to purchase goods online will continue to grow making shopping at home and on the move more convenient and easier

**We are demanding speedier home delivery of goods and services which is fuelling less efficient van use and leading to a growth in lifestyle couriers:**

- 74% of online retailers offer next day delivery services, while only 4% offer same day deliveries (the latter is increasing however).
- Nominated delivery time slots are offered by around 18% of retailers, and Saturday delivery by 35% (Oracle, 2016).
- In the last couple of years several major online retailers have introduced what are referred to as 'delivery passes'. These are membership schemes that provide members with 'free' home deliveries. Members have to pay either a monthly or annual subscription for their delivery pass, and often, in the case of grocers, still have to spend a minimum amount to qualify for free home delivery. Annual subscription fees typically range from £60-80 per retailer but fuel the misconception that delivery is typically next-day and 'free' (Allen et al., 2017).

**More dedicated trips are being made by consignees to collect packages they have missed first-time:**

- It has been estimated that in total 13-14% of all e-commerce deliveries in the UK arrive either late or when the customer is not at home (IMRG, 2014a).
- The IMRG has estimated that in 2014, the cost of these 'failed' deliveries to retailers and other traders for goods sold online in the UK was £771 million (IMRG, 2014b).

- The various systems of home delivery (delivery to homes by vans, click and collect / collection points, and locker banks)

### **Passenger trips are becoming an intrinsic part of the supply chain**

- Inefficient use of cars for freight (e.g. from click-and-collect/unattended locker to home) which suits retailers / carriers as it makes delivery systems more efficient and cheaper (allowing bigger loads to be delivered to a single point whereas deliveries to individual homes involves small transactions to many locations). Online sales that made use of Click & Collect services in 2016 accounted for 11% of total online sales, and 25% of all online clothing and footwear sales (Verdict, 2016a).
- Crowdshipping involves, ‘enlisting people who are already travelling from points A to B to take a package along with them, making a stop along the way to drop it off’ (US Postal Service, 2014). It therefore makes use of members of the public who are making journeys to act as couriers for the distribution of parcels and other small items, thereby creating new informal logistics networks. Such services have emerged over approximately the last five years, and have recently expanded to include journeys made especially to deliver a package, largely precipitated by the entry of UberRUSH into the marketplace (McKinnon, 2016). Crowdshipping is provided via crowdshipping online platforms such as Postmates, Zipments, Deliv, Roadie (In America, where there are currently more crowdshipping services than anywhere else), PostRope (Australia), Renren Kuaidi (China), Nimber (Norway), Trunkrs (Netherlands), and PiggyBaggy (Finland) (McKinnon, 2016).
- Such a model would be likely to reduce delivery costs and transit times, making same day delivery potentially more financially and operationally viable, and may provide online retailing with the lower cost operating model it requires to become more profitable. This would be an extension of the agent-based final-leg home delivery services used by major home shopping retailers for many decades. Such a future would involve crowdshipping replacing much of the existing model used by the parcels industry in urban areas involving employed staff using company-owned vehicles.
- If the growth in supply of crowdshipping permits ever-cheaper, ever-faster last-mile delivery services then this could permit a substantial growth in the demand for rapid response online retailing and hence ever-greater total traffic activity in urban areas.

### **The desire for convenience and the lack of time is fuelling the growth in food home delivery:**

- Over time, it is likely that this desire for convenience will result in ever-greater levels of home delivery of groceries, prepared ingredients/recipes and ready-to-eat meals, which will erode the dominance of traditional store-based grocery retailers (Mignot, 2015).
- It has been estimated that the UK takeaway and other restaurant home-delivered food market was worth approximately £6.7 billion in 2015, up from £4.4 billion four years ago (Fedor, 2016; Martin, 2016). This is forecast to increase to £7.6 billion by 2020 (Euromonitor International quoted in Ruddick, 2015).
- Whilst individual restaurants and restaurant chains have been expanding their home delivery services in a gradual manner, most of the growth in the market has resulted from the launch of third-party service providers, who offer meal deliveries from

multiple restaurants. These third-party providers are intermediaries between the restaurant and customer and vary in terms of the services they provide to restaurants.

- There has been substantial investment in the takeaway and home-delivered meal market in the last few years. It has been estimated that nearly \$10 billion (8.9 billion euros) was invested into 421 meal delivery deals since the start of 2014 according to research from CBInsights (quoted in Auchard, 2016).
- Deliveroo launched its meal home delivery service in the UK 2013. It currently operates in 81 cities globally, working with 15,000 restaurants that wouldn't otherwise offer deliver including Pizza Express, Prezzo and Gourmet Burger Kitchen. Deliveroo's daily orders have grown tenfold since January 2015 (Tugby, 2016).

***How do these changes relate to the way in which the activities that we participate in have changed? What other factors might explain change?***

- Trip generation resulting from new click-and-collect / collection point activity involves goods vehicles and cars. The wider traffic impacts related to the timing of these trips is not well understood.
- Increased deliveries to homes leads to new trip generation in residential areas, and associated parking, congestion and safety issues.
- Failed deliveries at home have led to an increase in personal deliveries to workplaces which results in trip generation in central urban areas putting pressure on post rooms in buildings. Some companies and organisations are starting to impose bans to discourage employees from diverting deliveries.
- More time-dependent deliveries has led to the need for logistics fulfilment centres in urban areas – new types of warehouses with different trip generation rates and vehicle types compared to traditional warehousing.
- The emphasis on walking, cycling and public transport has led to more bus lanes and cycle lanes in our cities. This has led to kerbside access issues for freight vehicles and a lack of/ insufficient loading/unloading space which can lead to unnecessary mileage with circulating vehicles looking for somewhere to stop. Drivers also use 'hoteling' where 70% of the round can be on-foot, using the vehicle as a mini-warehouse and replenishment centre as part of a multi-drop round. Having to return to locations later in multi-drop rounds can lead to double parking and waiting causing knock-on traffic impacts.

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