

Online Shopping

The number of goods bought online is increasing fast. DEMAND research shows that the transport and energy consequences of this growth depend on how shopping is organised and how and when goods are delivered.

There are many forms of shopping, including different forms of online shopping: all have consequences for the movement of goods and people, and for the patterns of energy demand that follow. Forms of shopping continue to evolve as shopping-related activities such as browsing, price comparison and purchase change.

These arrangements matter for travel demand in different ways. For example, the size of a shop is important, as is its location, the availability of parking space, loading sites and public transport routes, and the potential for storing goods in warehouses, retail outlets and at home. Time and timing, including expectations of convenience and speed of delivery are also important.

How shopping is organised is important for how the 'last miles' - that is, the last stage in transporting goods to their final destination - are managed. DEMAND researchers show that much depends on the delivery process and the timing of delivery. For example, when items are returned or attempted deliveries fail, more trips are needed. At the same time, the expectation of 'next day' deliveries makes consolidating and streamlining difficult.



Rather than comparing the energy consequences of online versus offline shopping, DEMAND researchers explain that the more important challenge is to identify what different forms and combinations of shopping entail and their implications for travel.

Cass, N. and Shove, E. (2017), 'The Last Mile and the Next Day: The changing times and spaces of shopping – implications for energy demand'. Cross-Cutting Research Insight. <http://www.demand.ac.uk/wp-content/uploads/2017/12/The-Last-Mile-and-the-Next-Day-final.pdf>

DEMAND Research Insight #18 ONLINE SHOPPING. <http://www.demand.ac.uk/wp-content/uploads/2018/04/demand-insight-18-v4.pdf>

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