E-commerce logistics in Paris

Dr. Laetitia Dablanc

Université Gustave Eiffel

French Embassy in the United States
Cities of Tomorrow - Webinar ‘The impact of e-commerce on mobility’, 26 October 2021
• Research oriented Chair
• **Warehouses, innovations, new trends in consumption** and city logistics

Results available online:
• **Observatory of ecommerce mobilities** ([https://www.ecommercemobilities.com/](https://www.ecommercemobilities.com/))
• Surveys on **gig workers for instant delivery** platforms in Paris 2016, 2018, 2020, 2021
• E-commerce logistics **real estate** and relationships with urban form in 74 large cities around the world

E-commerce growth since the pandemic in France

- +32% B2C products sold in 2020 (growth rate twice as high as usual)
- Traditional retail has accelerated omni-channel services
- Huge increase in grocery and DIY click-and-collect
- Huge increase in instant deliveries (UberEats, Deliveroo, Glovo)
- Higher diversity of e-consumers: poor and rich, rural and urban, old and young, women and men
Connecting urban delivery stakeholders

- A City of Paris website identified and mapped local retailers proposing home delivery

New formats for super fast grocery delivery

- Cajoo promises to deliver in 15 minutes
- Gorillas promises to deliver in 10 minutes
- Getir promises to deliver in a few minutes

- Use of ‘dark stores’, urban facilities serving as fulfillment warehouses for products to be delivered (1000 to 10,000 SKUs)
### Diversified modes for urban deliveries

<table>
<thead>
<tr>
<th></th>
<th>Cars</th>
<th>Mopeds</th>
<th>Cargo-bikes</th>
<th>Bicycles</th>
<th>Walking/transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livreur en poids lourd</td>
<td>100 000</td>
<td>70 000</td>
<td>&gt; 3500</td>
<td>&gt; 20 000</td>
<td>500-1000</td>
</tr>
<tr>
<td>Livreur en VUL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 35 000</td>
</tr>
<tr>
<td>Livreur en voiture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 2000</td>
</tr>
<tr>
<td>Livreur en scooter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livreur en vélo-cargo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livreur en vélo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livreur à pied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

100 000 (estimations nombre d'emplois France compte d'autrui)
Micro-freight companies in the Paris region

- In 2019: 24,000 new micro-companies in freight transportation
- In 2020: 32,000 new micro-companies in freight transportation

(Insee)

B2C parcel delivered in the Paris region

- In 2019: 600,000/day
- In 2020: 900,000/day

(approximation from La Poste group data)
A huge increase in cycle-logistics in Paris

One of the main advantages: access to bike lanes (and ‘corona-lanes’)

International Cargo Bike Festival Groningen
June 14-16th 2019
Accelerated implementation of urban warehouses

- Recycling local shops, car parks or other underused areas into logistics facilities
- Micro-hubs for last mile distribution of parcels and grocery
- ‘Dark kitchens’: for meals
- ‘Dark stores’: for groceries
  - Former gas-station in Paris (project)
  - Empty space under the Paris ring-road (finalized in December 2020)
Four networks of pick-up-point networks, representing one fourth of e-commerce deliveries

<table>
<thead>
<tr>
<th></th>
<th>Paris region</th>
<th>Grand Paris</th>
<th>City of Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relais Colis</td>
<td>1406</td>
<td>790</td>
<td>291</td>
</tr>
<tr>
<td>Pickup (hors consignes)</td>
<td>2685</td>
<td>1709</td>
<td>655</td>
</tr>
<tr>
<td>UPS</td>
<td>1620</td>
<td>936</td>
<td>421</td>
</tr>
<tr>
<td>Mondial Relay</td>
<td>2317</td>
<td>1272</td>
<td>465</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8028</strong></td>
<td><strong>4707</strong></td>
<td><strong>1823</strong></td>
</tr>
</tbody>
</table>

Apur, 2020
## Comparing Manhattan and the city of Paris (6T, 2018)

<table>
<thead>
<tr>
<th>Location Description</th>
<th>Manhattan</th>
<th>Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home and in hands</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>To doorman</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>In mailbox</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>In a store (click and collect)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>In an automated locker</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>In post office</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>In a pick up point</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>At work</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Automated lockers catching up

Apur, 2020
Gig workers in instant deliveries in Paris: impact of the pandemic

- More students on the job, reversing a strong trend since 2016
- 34% turned to this activity because of the pandemic (61% among students)
- The pandemic has led to a decrease in income for more than half of delivery workers
- 57% of delivery workers say that the pandemic has worsened their working conditions

Diversification of vehicles for instant deliveries: mopeds, cars and electric shared-bikes

2021
47% bicycle
36% mopeds
7% cars

⇒ Increased use of motor vehicles: (strictly regulated in French legislation)
⇒ Increased use of bike and scooter sharing (not allowed for deliveries)
Open-access data on bike-sharing

- Use of AI to identify use of bike-sharing for deliveries
- Number of deliveries, routes, pick-up and delivery points
Commuting to the work place (2021)

- 62% with vehicle used for deliveries (bike or moped or car)
- 16% in public transit, with bike
- 13% in public transit
- 9% other
Less concentration of logistics development in the largest four metro areas (Lille, Paris, Lyon, Marseille) in 2020

(ImmoStat/BNP Paribas Real Estate)
Ressources

- **LOGISTICS CITY CHAIR**: www.lvmt.fr/en/chaires/logistics-city-sogaris/
- World Conference on Transport Research: https://www.wctrs-society.com/
- **METROFREIGHT**: www.metrans.org/metrofreightw.metrans.org/metrofreight
- Urban Freight Lab: https://depts.washington.edu/sctlctr/urban-freight-lab-0
- Urban freight platform: https://www.chalmers.se/en/centres/lead/urbanfreightplatform/Pages/default.aspx