

TU Delft Thesis defence A.T.C. Onstein 1 December 2021

### So many new warehouses in Paris today: why?

Dr. Laetitia Dablanc











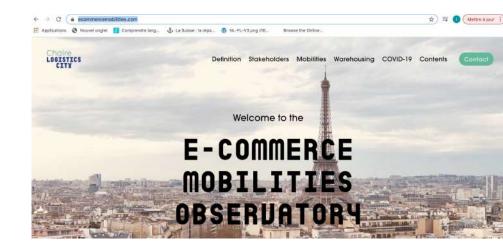


- Research oriented Chair
- Warehouses, innovations, new trends in consumption and impacts on city logistics

Results available online:

- Observatory of ecommerce mobilities
- Survey reports on gig workers for instant delivery platforms in Paris 2016, 2018, 2020, 2021
- Barometer of urban logistics under covid lockdown
- Logistics real estate in 74 large cities around the world

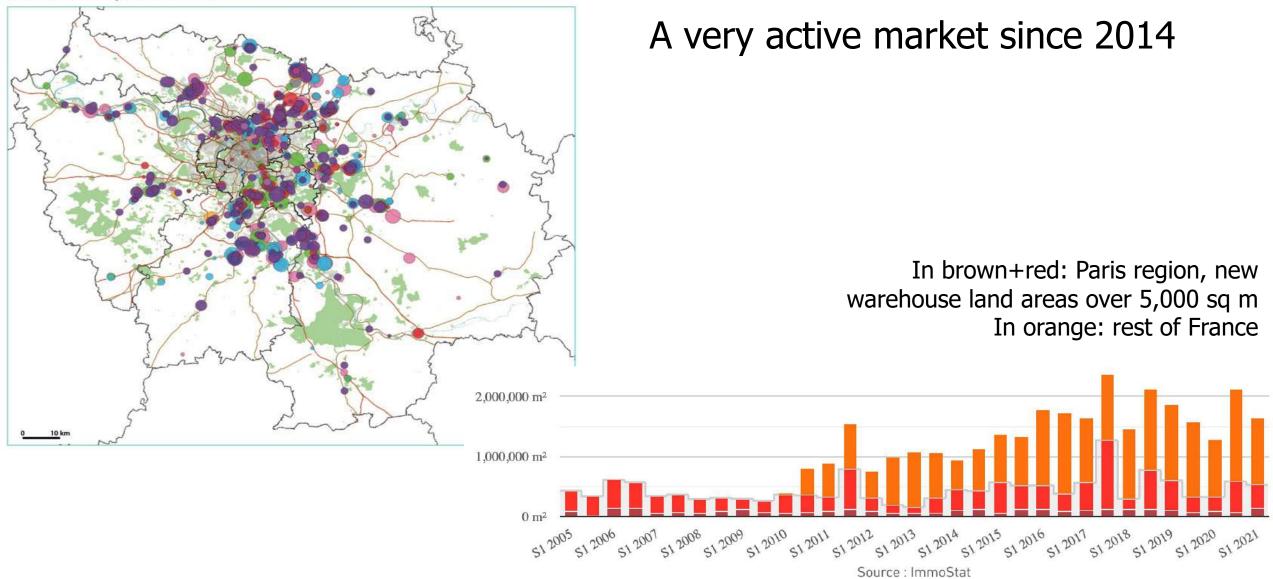






#### Warehouses in the Paris region

LES ENTREPÔTS LOGISTIQUES EN ILE-DE-FRANCE



## Warehouse indicators for the Paris region 2000-2012 (>5000 sq m)

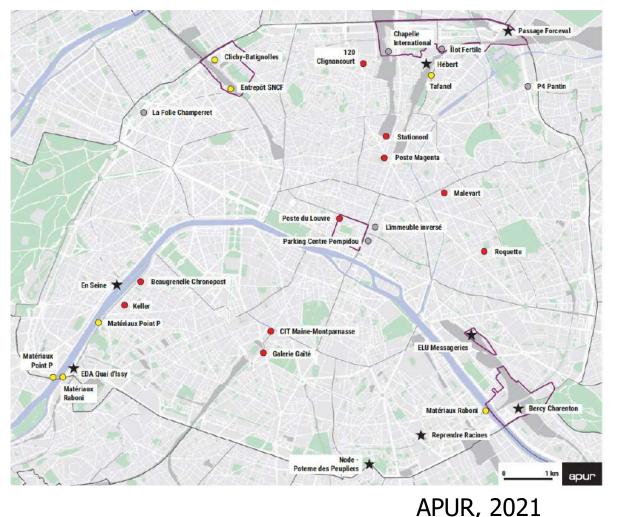
Number of WHs 2000: 714 2012: 955

Number of WHs per million inhabitants 2000: 65 2012: 81

Number of WHs per 1000 sq m 2000: 59 2012: 79

Dablanc, Palacios, 2020; Heitz, 2018 Cuniversité Gustave Eiffel

### Warehouses (city hubs) in Paris since 2011 "Proximity logistics" (H. Buldeo Rai)



- Building permits applications for logistics facilities 2011-2019
- Missing:
  - New logistics facilities not requiring a building permit
  - Click-and-collect facilities and pick-up-points (registered under retail)
  - Building permits since 2019 including 'dark stores' since 2020



### Chapelle logistics hotel (45,000 sq m)

- Innovative architecture on a former freight rail area
- Four levels
- Multi-use: logistics, offices, data center, sports, urban farm
- Rail service (unused)



Hôtel logistique de Chapelle international (18e arr.) inauguré en juin 2018. © JGP



## Many Paris underground municipal car parks accomodate delivery companies



Star Service

FedEx

Chronopost

Chronopost



### Temporary rental and time-sharing

Swoopin, Paris 11th Six-month rental before redevelopment for social housing project



Amazon, Paris 14th use of of a bus depot during the day



L. Dablanc

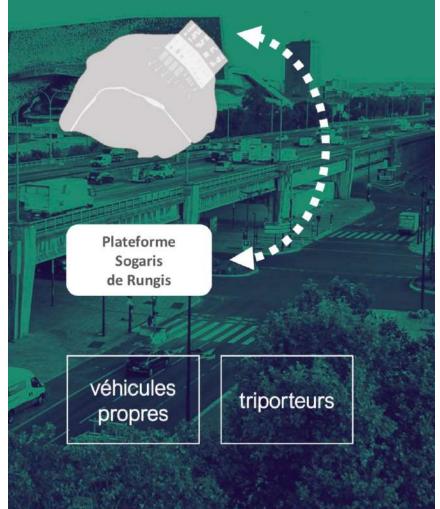
F. Bouchon Le Figaro



### Urban logistics hub for cargo-cycle operations under the Paris ring-road



Sogaris



DY

UN PROJET

Sogaris

#### Large renovated multi-story warehouse

- Preserved from the 1960s
- Fully rented to diverse set of clients from Amazon to the Louvre
- Electric vans on roof





# Use of river banks in open air for a daily intermodal operation for a large retailer.

**XPOLogistics** 

franprix 🛎

0 Logistics

xpoLogisti franprix

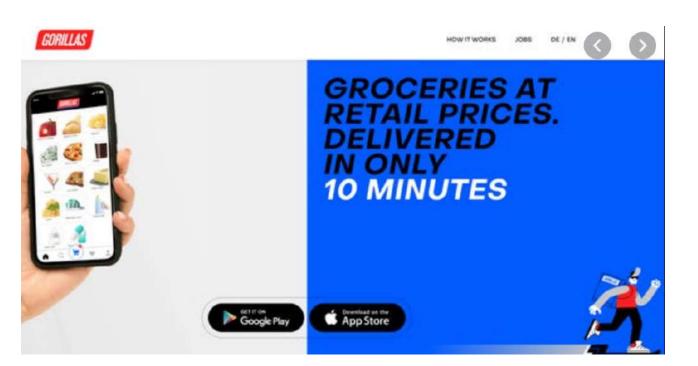
**XPO** logistics

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### SERVICE LEVEL Small picking hubs close to the consumers for fast or ultra-fast deliveries

• Around 200 today in Paris?



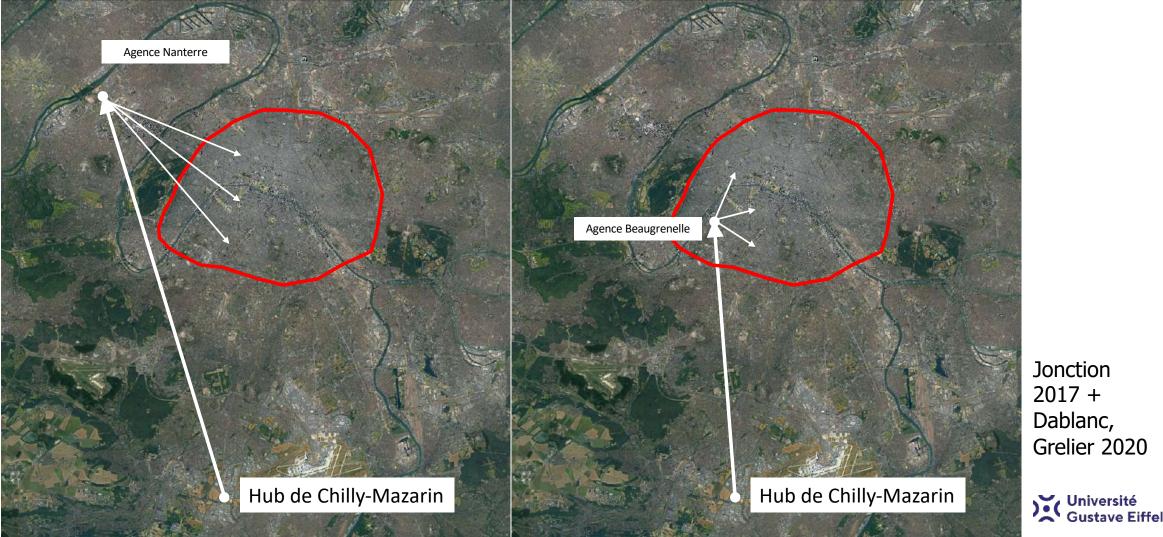
#### Cajoo dark store in Paris Champerret



Photo LSA Université Gustave Eiffel

### CORPORATE SOCIAL RESPONSIBILITY Reducing freight vehicle-km: example of Chronopost

Without an urban hub:151 tons CO2/y With an urban hub: 74 tons CO2/y



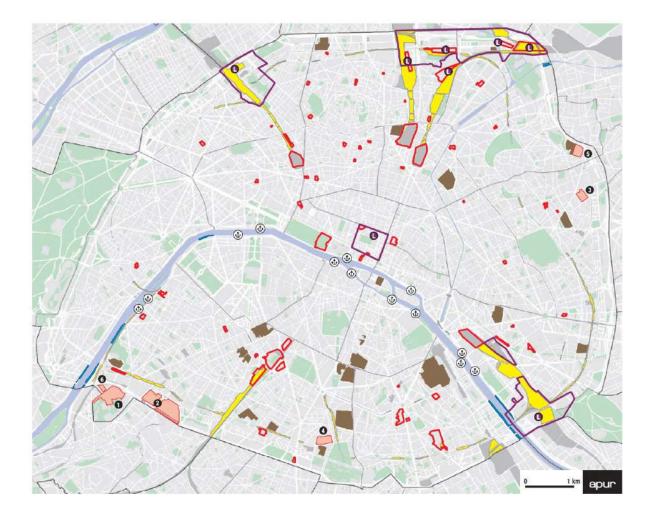
Jonction 2017 +Dablanc, Grelier 2020 Introducing cargo-cycles and e-vans in the supply chains Example: delivery of fresh grocery in an underground parking in Ile de la Cité

#### ACHEMINEMENT DES MARCHANDISES DU PRODUCTEUR JUSQU'AU CONSOMMATEUR PARISIEN

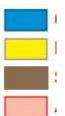




### 2016 zoning ordinance of Paris: several regulations incentivizing the implementation of logistics facilities



 Areas dedicated to large urban services



- River banks Rail areas Hospitals or former hispitals Other
- 61 location perimeters for logistics activities

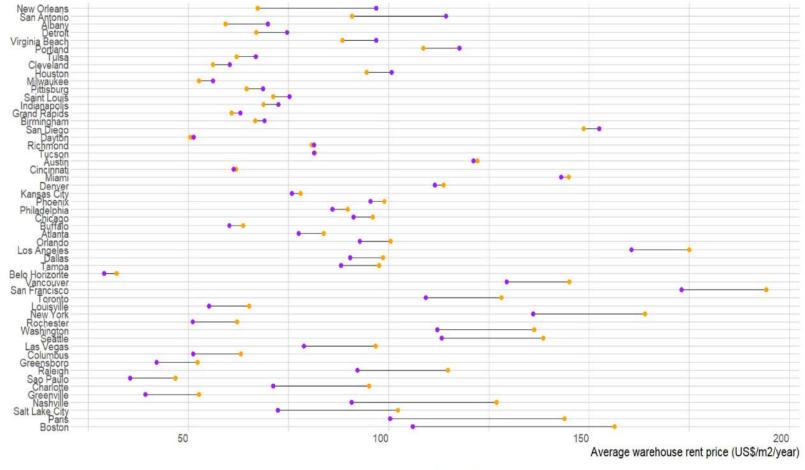


### Conclusion

- What drives the development of Paris city hubs?
  - Service level
  - Responding to changing consumer demands
  - Innovation
  - Responding to current or expected public policies
- Large investors are looking into this new market (Prologis)
- One major driver for investors: with high demand and short supply, rental prices are up (routinely 200 €/y/sqm, can go as high as 400), returns on investments are faster than a few years ago



# Paris among the most expensive markets for urban warehouses (De Oliveira, Dablanc, Schorung, to be published)



Urban location • AH • PAZ

Figure 4: Representation of warehouse average rent prices for AH and PAZ for each metropolitan region





- CHAIRE LOGISTICS CITY: <u>www.lvmt.fr/en/chaires/logistics-city-sogaris/</u>
- METROFREIGHT www.metrans.org/metrofreight<u>w.metrans.org/metrofreight</u>
- Dablanc, L., Frémont, A. (Dir) (2015) La métropole logistique, Armand Colin
- Dablanc, L., Palacios, L. (2020) Locational patterns of warehouses in 74 cities around the world, a comparative meta-analysis, <u>https://www.lvmt.fr/wp-content/uploads/2021/09/Dablanc-Palacios-Arguello-2020.pdf</u>
- Dablanc, L. (to be published) Chapter 3.1 Land use planning for a more sustainable urban freight. In Edoardo Marcucci, Valerio Gatta, Michela Le Pira (Ed) Handbook on city logistics and urban freight, Edward Elgar
- Many reports by APUR, the Paris urban planning agency, on logistics hubs, eg https://www.apur.org/fr/nos-travaux/sites-logistiques-actuels-potentiels-contributiongroupe-travail-immobilier-strategie-logistique-parisienne

Sous la direction de Laetitia Dablanc et Antoine Frémont



LE TRANSPORT DE MARCHANDISES ET LE TERRITOIRE DES GRANDES VILLES



ARMAND COLIN

