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Real Estate Trends: Tomorrow Begins Today
International Conference on Real Estate Trends & Innovation
13–14th October 2025, ESAI Lisbon

Panel 1 Markets and real estate projects

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Measuring Urban Vitality:
The Impact of the Grand Paris Express on Real Estate Markets

Outline

1. Motivation and Literature review
2. Objective
3. Measuring Urban Vitality
4. Interactive Map

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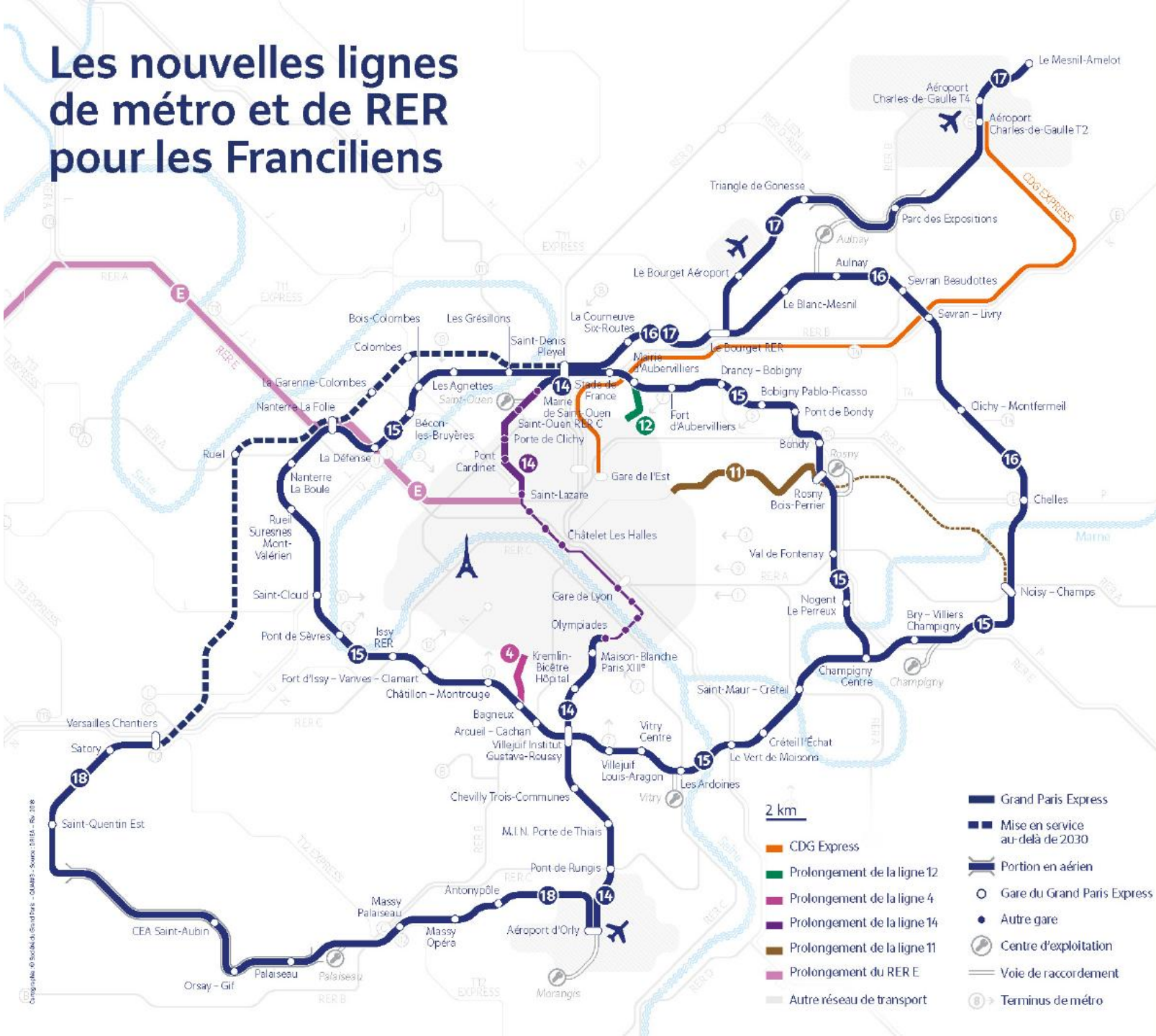
Les nouvelles lignes de métro et de RER pour les Franciliens



Calendrier de mises en service

Future Line 18 of Grand Paris Express, Saclay
Credit : Carmen Cantuarias

Motivation

In a context of urban transformation:

- Large-scale projects such as the future line 18 of the Grand Paris Express (GPE) raise major issues for regional planning and development.
- These projects are not limited to mobility issues: they profoundly redefine local dynamics, influence social and economic interactions, and transform perceptions of surrounding areas.
- Urban sprawl ! Increasing the loss of biodiversity in urban and peri-urban areas.
- Strengthening Compact Cities: ZAN French policy.

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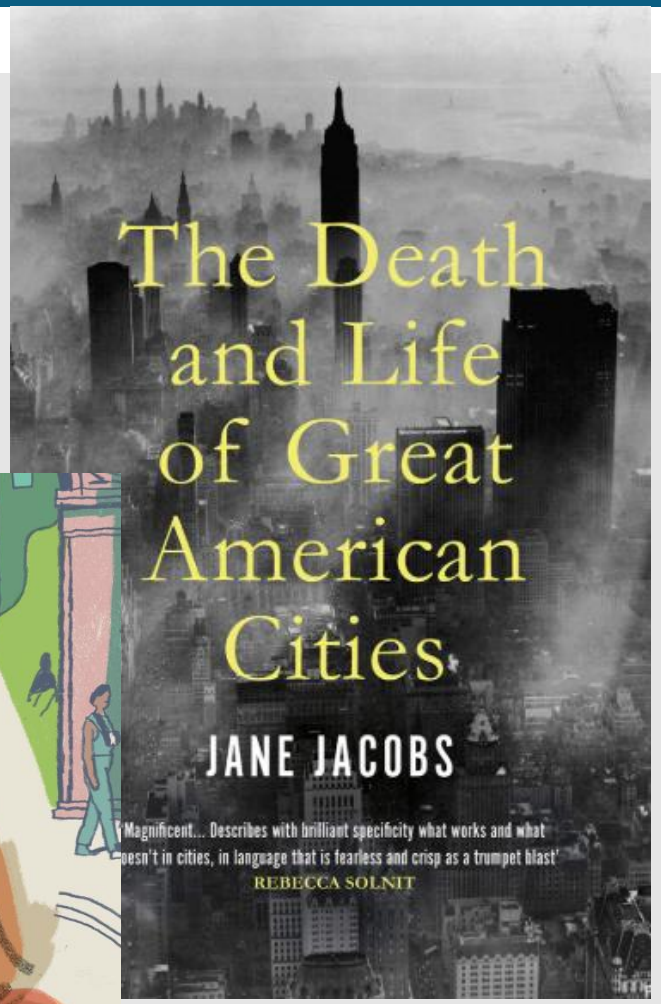
Literature review: Urban Vitality (1/3)

For Jacobs (1961) “The Death and Life of Great American Cities”: Urban Vitality

Individuals not only need to live in a city; they also want to “desire” the city in which they reside.

This attraction to an urban space is conceptualized in the notion of Urban Vitality.



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Literature review: Urban Vitality and territorial attractiveness (2/3)

Territorial attractiveness is understood as the ability of a space to attract and maintain people. This concept is conceived:

- as a development strategy (Friboulet, 2010);
- as a political challenge for territorial development, particularly for isolated rural or peri-urban areas, notably in terms of demographic and economic decline (Chaze, 2017);
- by a macroeconomic approach using global criteria of territorial attractiveness to facilitate a comparison of territories (Hatem, 2004).

Territorial characteristics -> Urban Vitality

In our research, Urban Vitality is based on several interconnected dimensions, creating a favourable environment for the quality of life of its inhabitants and for its economic, social and cultural development.

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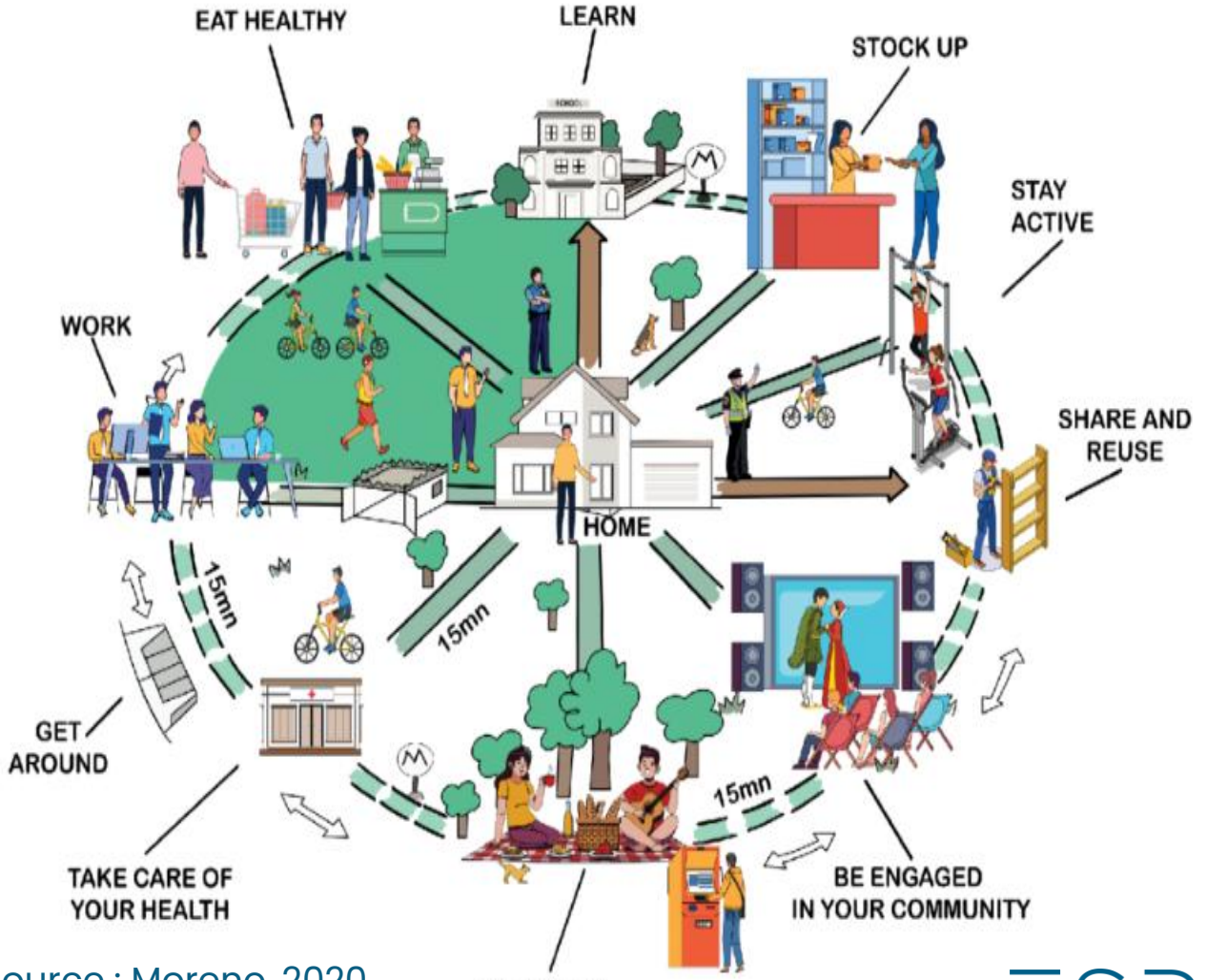
Literature review: Urban Vitality and 15-minuty city (3/3)

- Urban Vitality & Accessibility (Radke, 2000; Guida 2020),
- 15-minute city studies: Barcelona (DelclosAlio 2018), Concepción, Chile (Nunez 2022), Santiago de Chile (Fuentes 2020), Istanbul (Pakoez 2022).
- Spatial analysis 15-minute city (Mouratidis 2024).
- Labor and housing markets & Infrastructure (Chapelle 2017).



Source : Moreno, 2020.
Image : Bruno Happold

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Objective

- Characterizing the territories impacted by the future Line 18 through the prism of the concept of Urban Vitality.
- Evaluate the impact of a new transport infrastructure in the territories.
- Decision-making tool for developers and investors.

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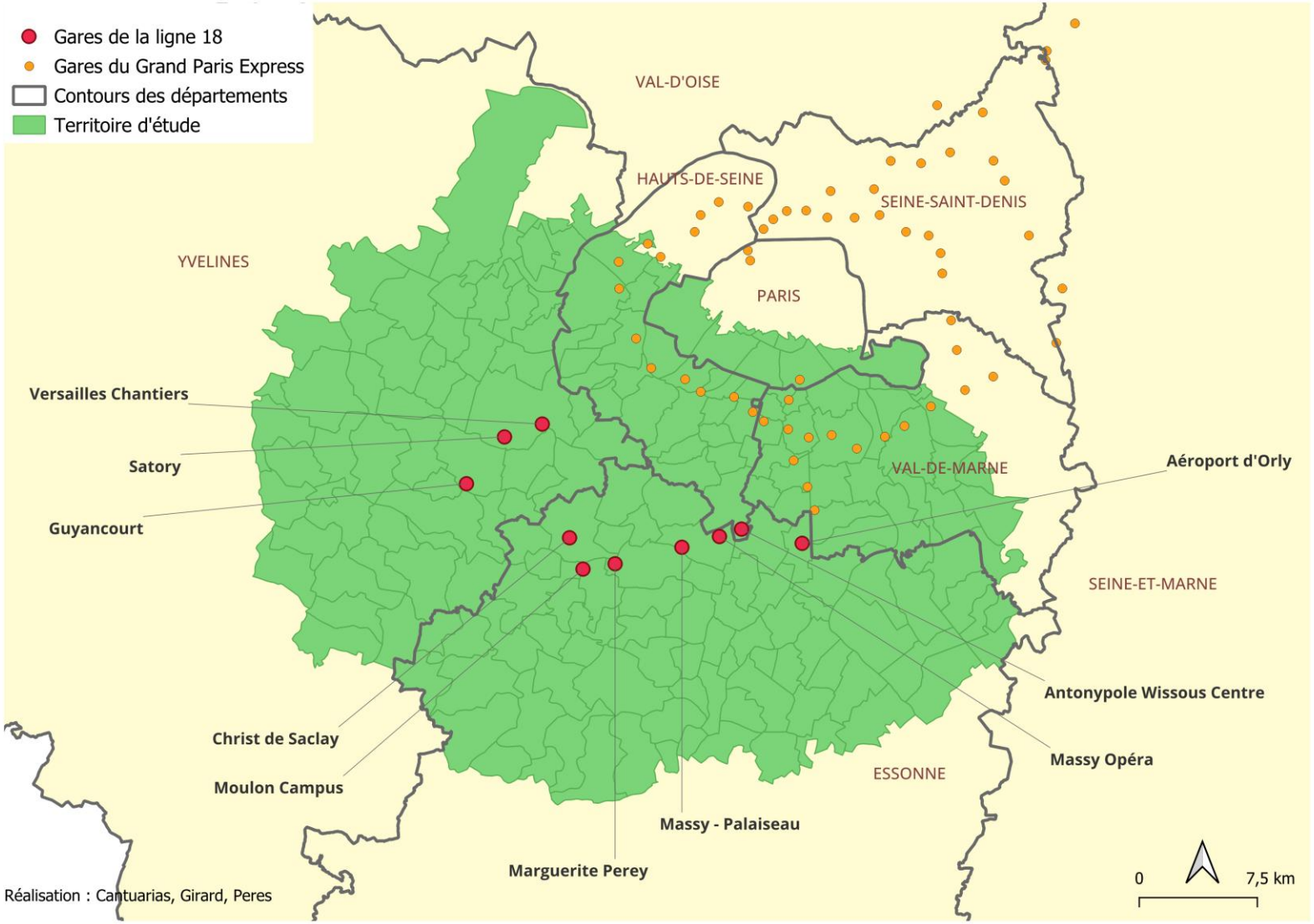
Scope of study : 1 686 IRIS



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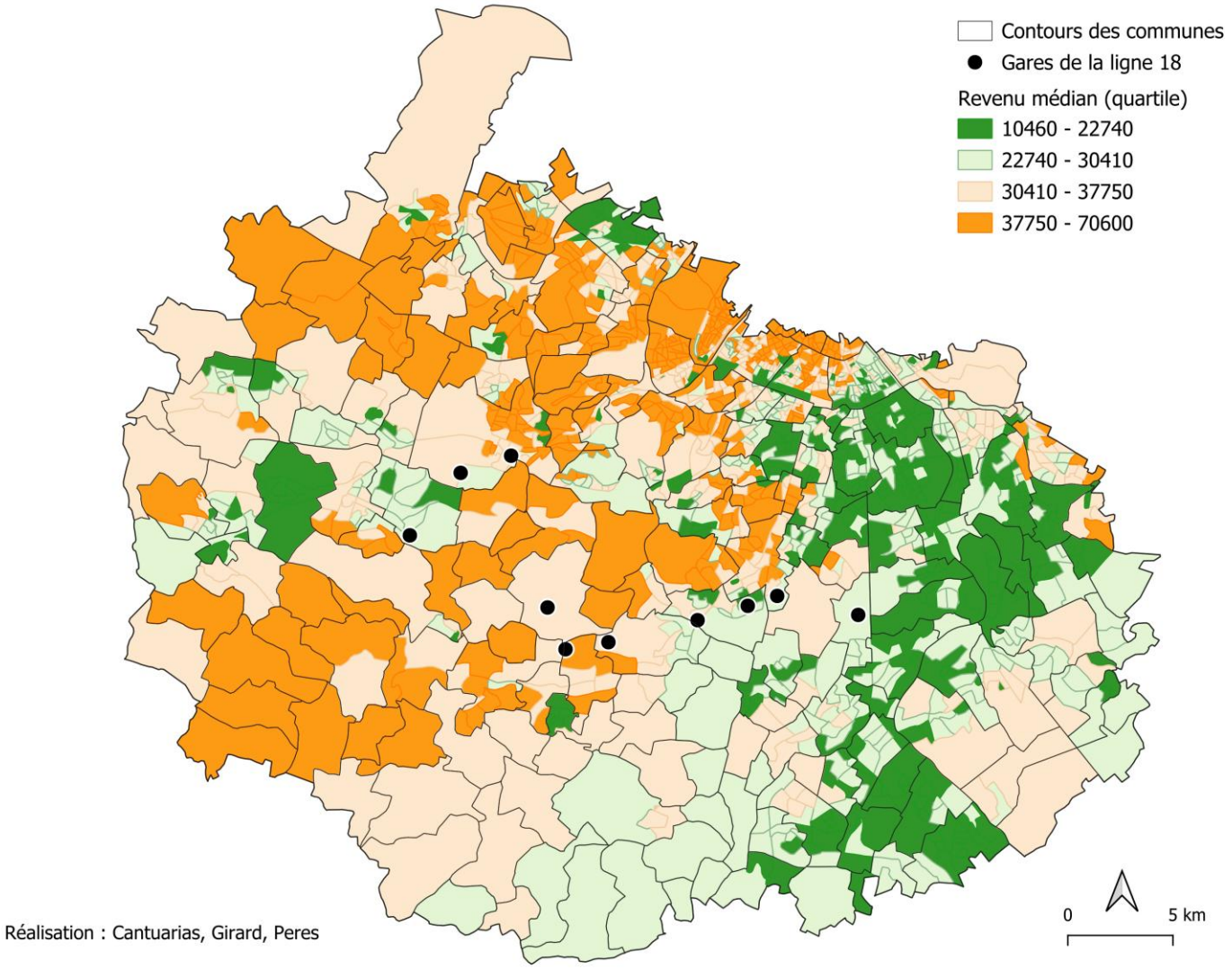
Median household income by quartile in 2021 in the territories impacted by line 18 of the GPE



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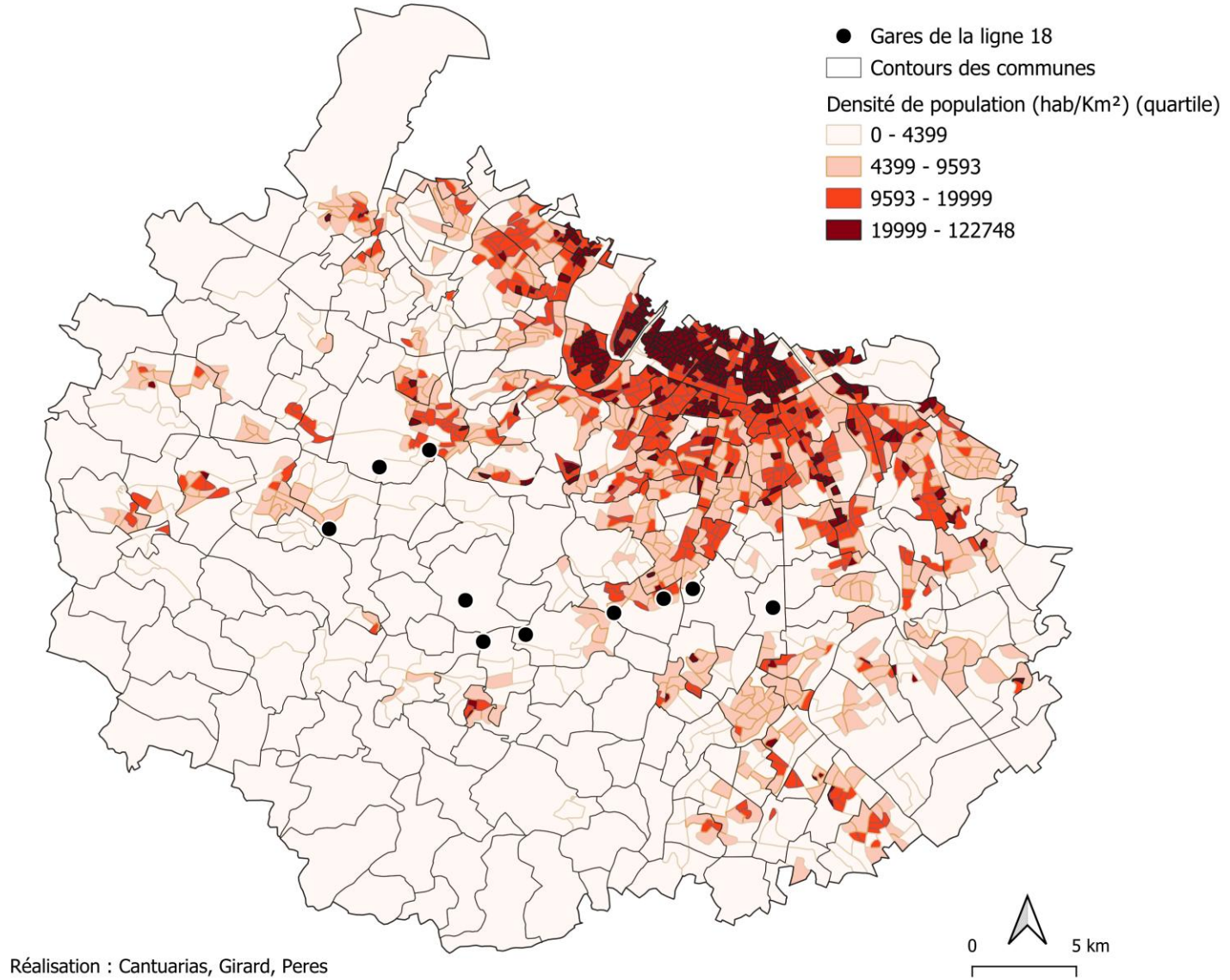
Population density (*km*2) of territories impacted by line 18 of the GPE



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Economic structure of the territories

Campus of the University of Paris-Saclay, AgroParisTech and INRAE
Credit : Carmen Cantuarias

- Public services: Massy-Opéra station area, these sectors together account for 61.9% of jobs.
- Transport and construction - Airport activity of Orly : the station is home to 4,810 salaried jobs, almost one in five in Paray-Vieille-Poste and Orly.
- Research and education hub: the station areas of Orsay-Gif, Palaiseau, Christ de Saclay and Moulon Campus.

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Housing

New property developments in Palaiseau in front of INRAE
Credit : Carmen Cantuarias

- Overall, rents have been rising until 2022, as well as prices.
- Five municipalities have a social housing stock of over 20% and four have a priority district.
- The number of senior citizens is increasing less rapidly than in the rest of France, the number of senior residences could also increase along line 18.
- In view of the ambitious development of higher education and research centres, there seems to be a shortage of student accommodation.

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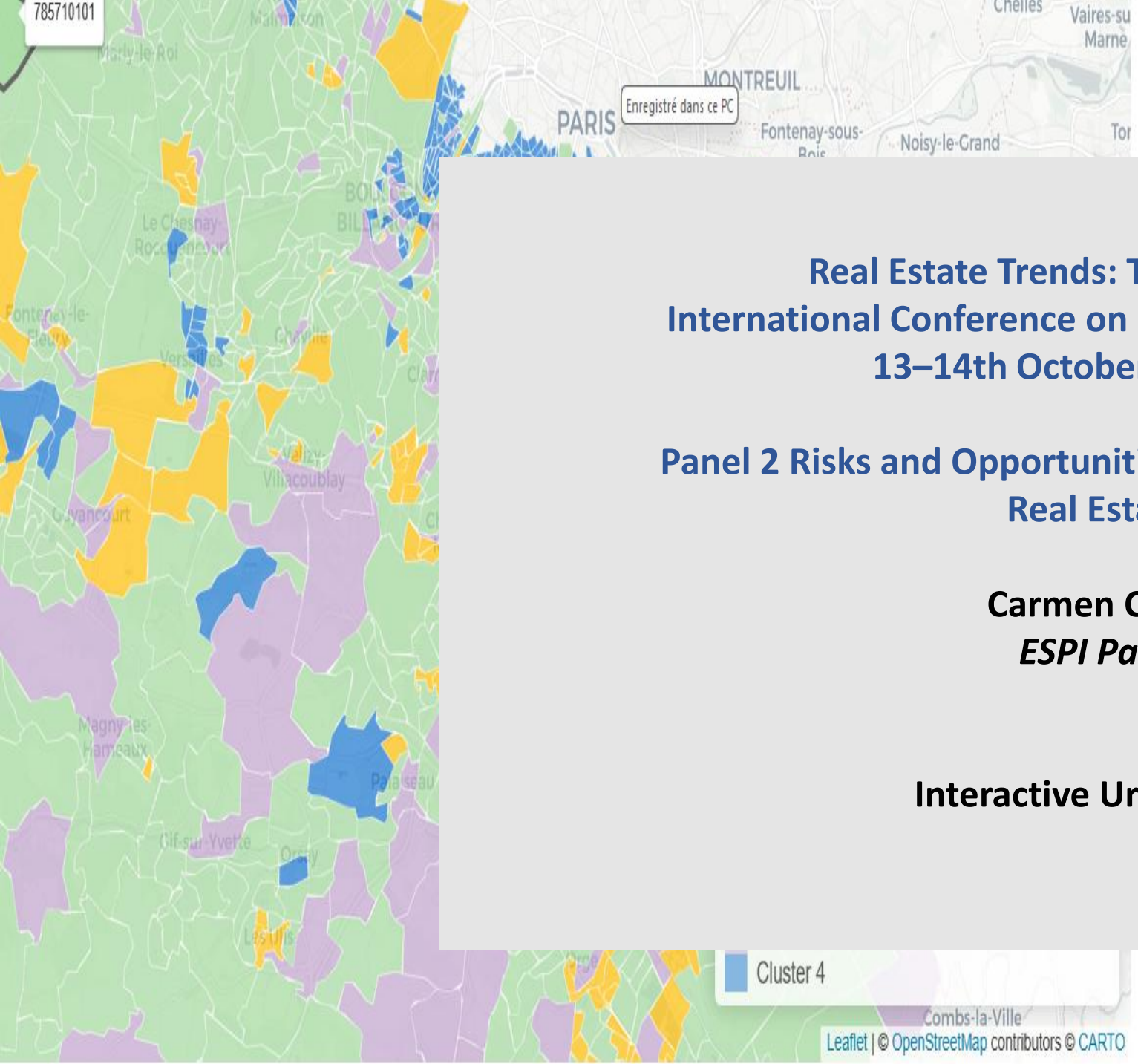

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Panel 2 Risks and Opportunities in Ibero-French Collaborative Real Estate Projects

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Interactive Urban Vitality Map

Mapping urban vitality: line 18 serving heterogeneous areas

Urban Vitality Measure:

- Classification of territories impacted by line 18 of the GPE according to their urban vitality level.
- 6 PCA (by social fonction) and HAC (clustering).
- 60 variables of 200 databases.
- 1 686 IRIS located 15 minutes by car as the crow flies at 50km/h, i.e.
- 12.5 km from the new line 18.

- Sources: INSEE, BPE 2021, BD TOPO 2024, Data Île-de-France (2017), IdF Open Data (2024), OpenStreetMap, Open data plateforms on Education, Sports and Young people, Data from companies : Explore and BNP Paribas Real Estate.

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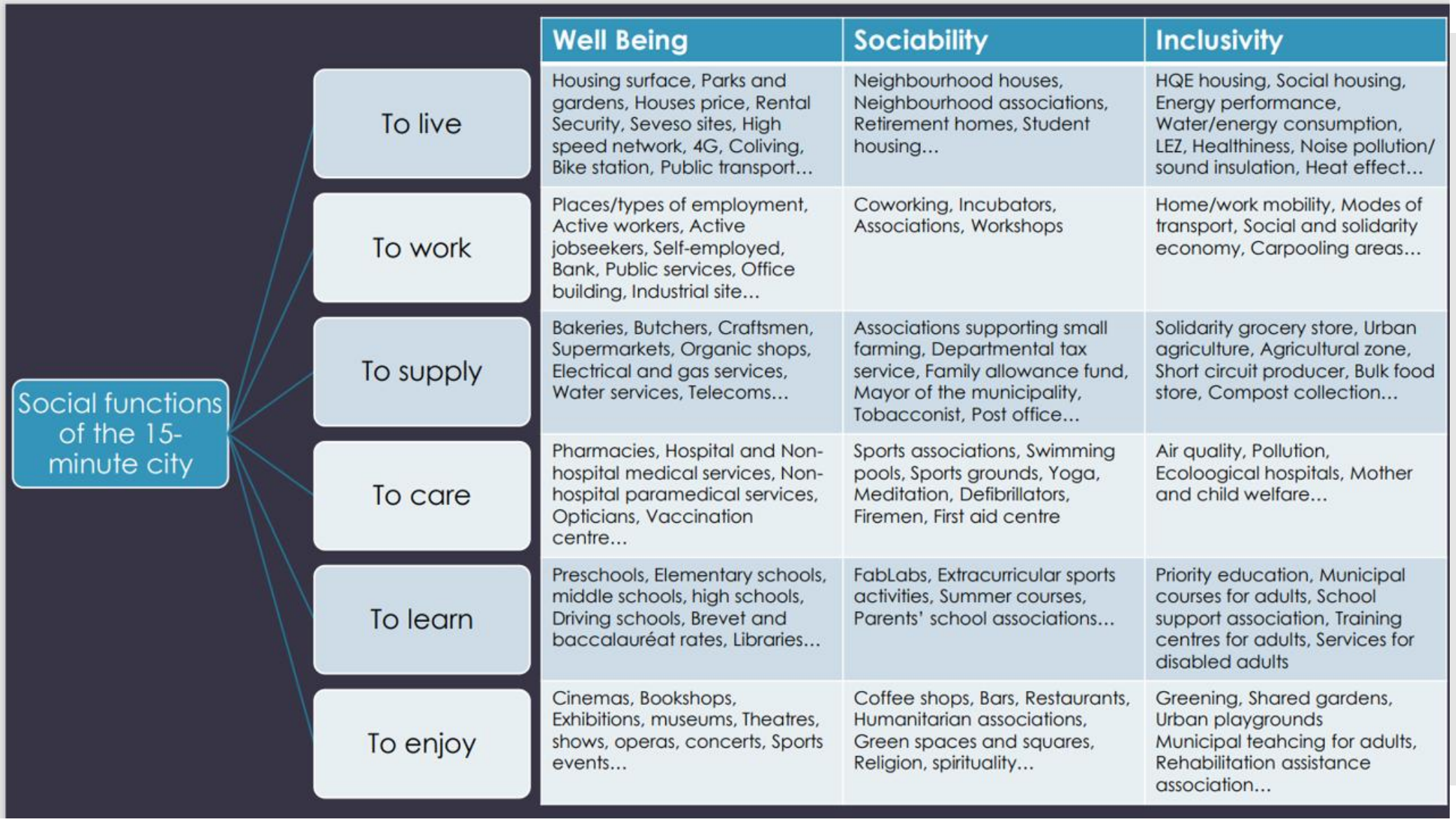
Urban Vitaly Measure : Social fonctions



	Well Being	Sociability	Inclusivity
To live	Housing surface, Parks and gardens, Houses price, Rental Security, Seveso sites, High speed network, 4G, Coliving, Bike station, Public transport…	Neighbourhood houses, Neighbourhood associations, Retirement homes, Student housing…	HQE housing, Social housing, Energy performance, Water/energy consumption, LEZ, Healthiness, Noise pollution/ sound insulation, Heat effect…
To work	Places/types of employment, Active workers, Active jobseekers, Self-employed, Bank, Public services, Office building, Industrial site…	Coworking, Incubators, Associations, Workshops	Home/work mobility, Modes of transport, Social and solidarity economy, Carpooling areas…
To supply	Bakeries, Butchers, Craftsmen, Supermarkets, Organic shops, Electrical and gas services, Water services, Telecoms…	Associations supporting small farming, Departmental tax service, Family allowance fund, Mayor of the municipality, Tobacconist, Post office…	Solidarity grocery store, Urban agriculture, Agricultural zone, Short circuit producer, Bulk food store, Compost collection…
To care	Pharmacies, Hospital and Non-hospital medical services, Non-hospital paramedical services, Opticians, Vaccination centre…	Sports associations, Swimming pools, Sports grounds, Yoga, Meditation, Defibrillators, Firemen, First aid centre	Air quality, Pollution, Ecoloogical hospitals, Mother and child welfare…
To learn	Preschools, Elementary schools, middle schools, high schools, Driving schools, Brevet and baccalauréat rates, Libraries…	FabLabs, Extracurricular sports activities, Summer courses, Parents' school associations…	Priority education, Municipal courses for adults, School support association, Training centres for adults, Services for disabled adults
To enjoy	Cinemas, Bookshops, Exhibitions, museums, Theatres, shows, operas, concerts, Sports events…	Coffee shops, Bars, Restaurants, Humanitarian associations, Green spaces and squares, Religion, spirituality…	Greening, Shared gardens, Urban playgrounds Municipal teahcing for adults, Rehabilitation assistance association…

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Mapping urban vitality: 4 Clusters

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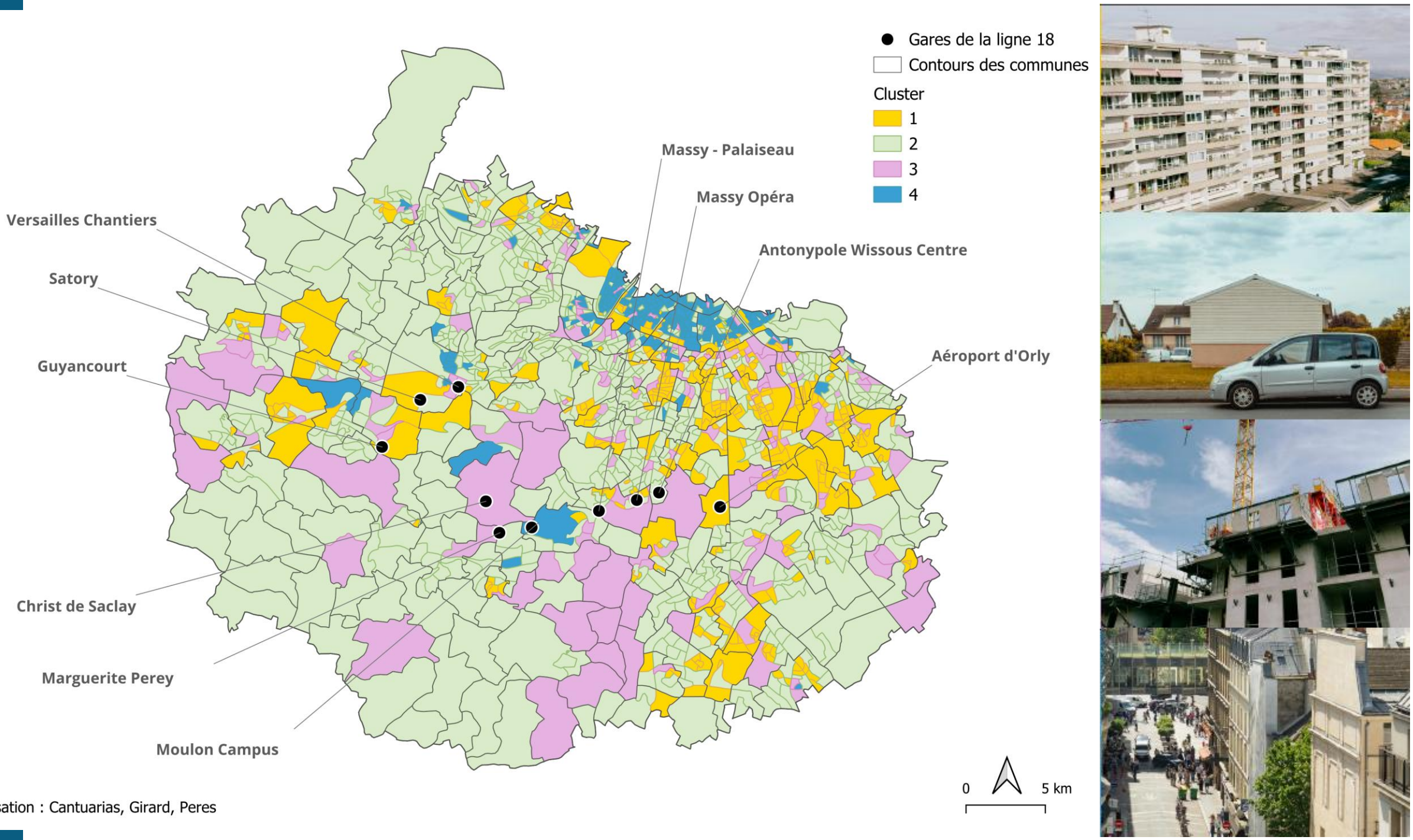
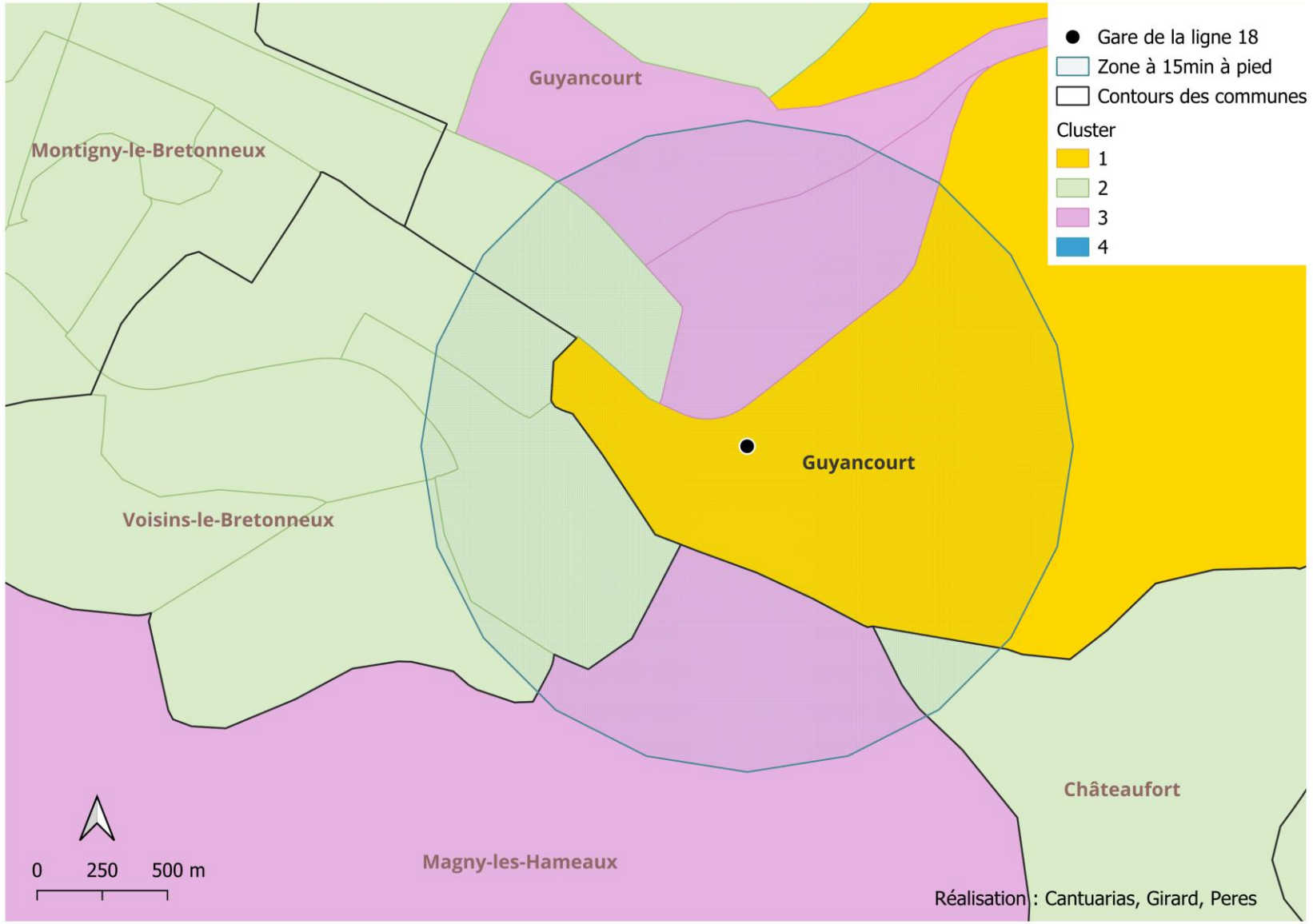


Réalisation : Cantuarias, Girard, Peres

Case study : Guyancourt station area



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Case study : Guyancourt station area

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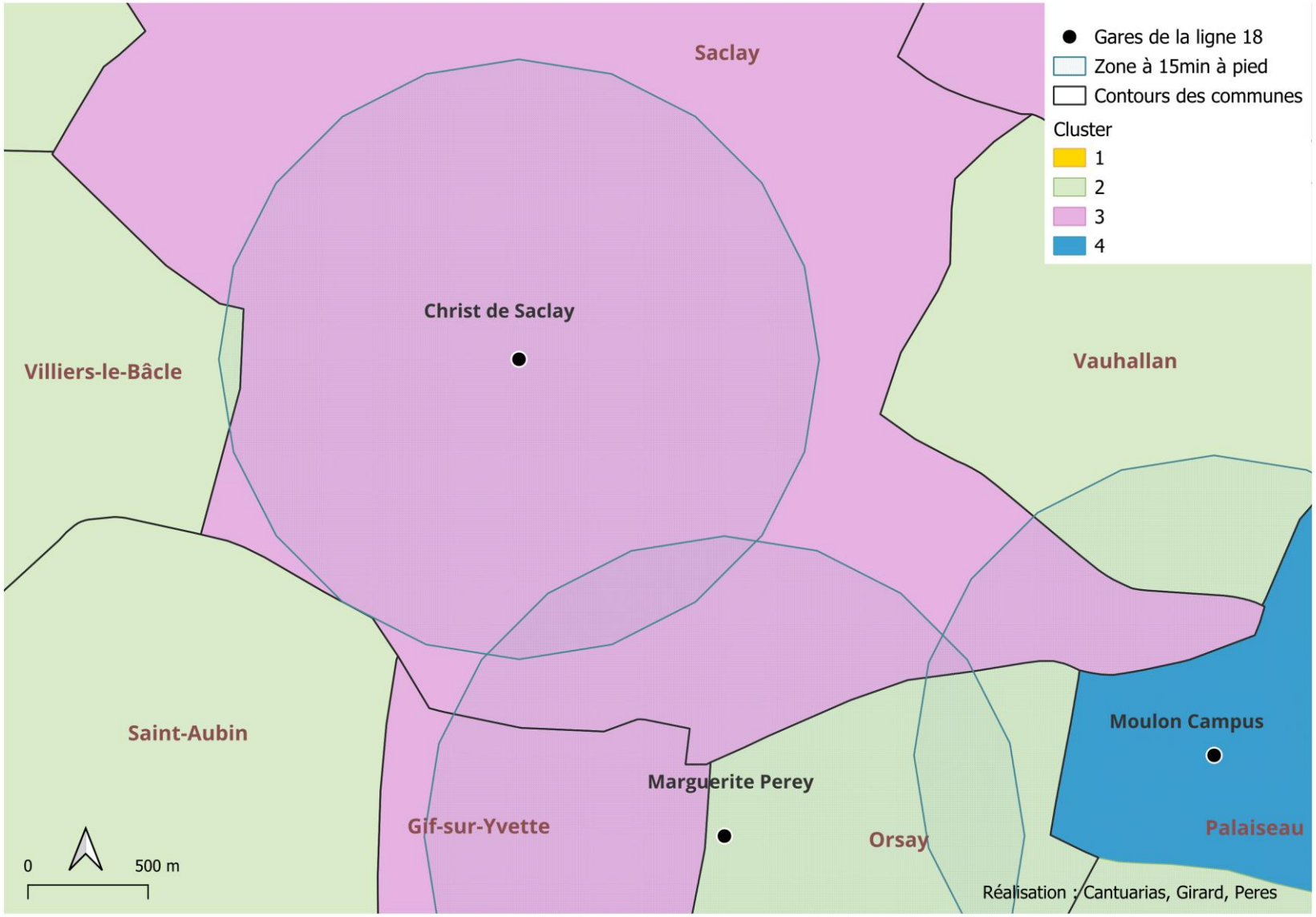
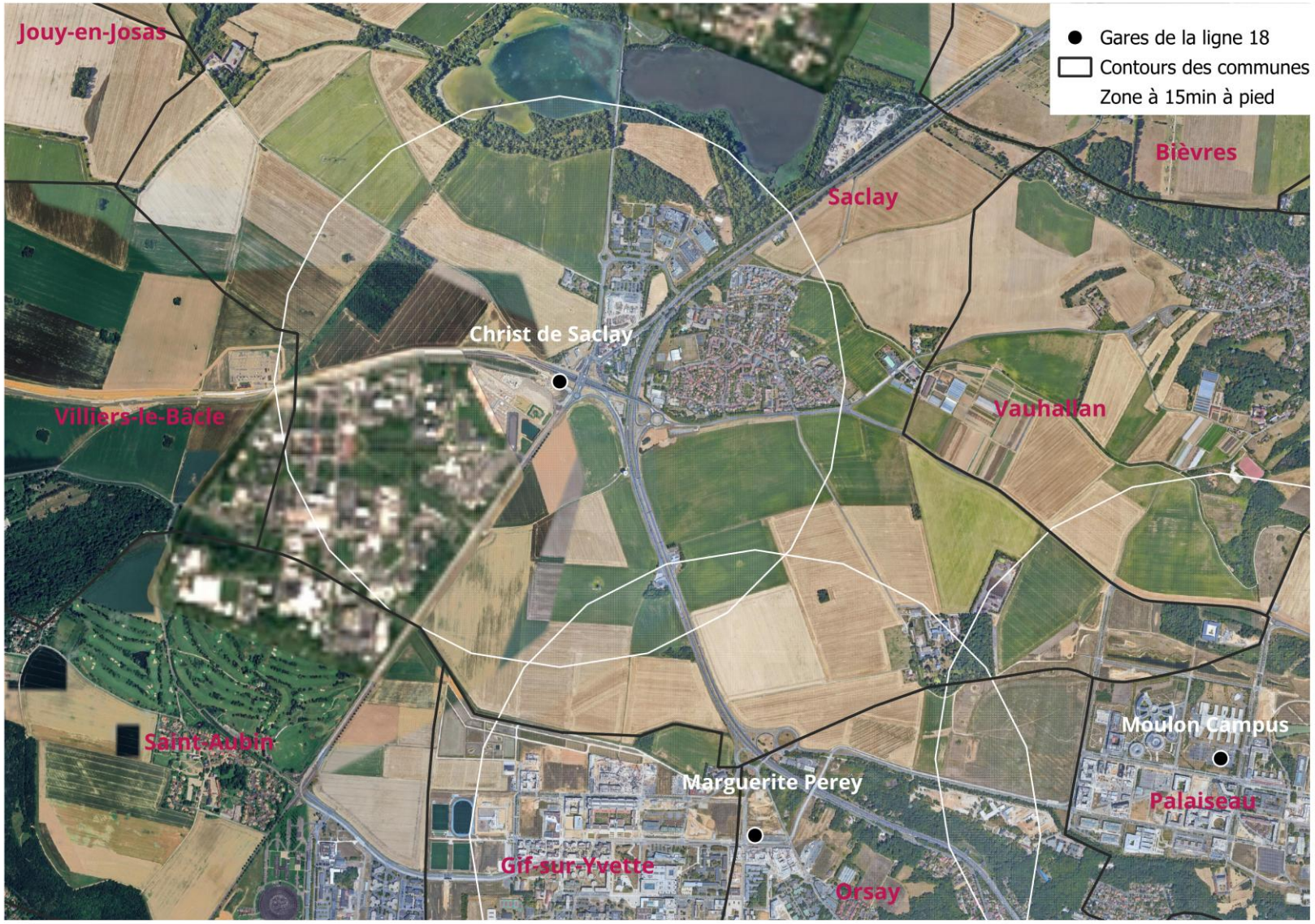
Case study : Paris-Saclay educational and research hub



Case study : Paris-Saclay educational and research hub



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Thank you for your attention

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