



JOB OFFER

Research Officer (M/F) in Mobility Economics

DR - CIRED

1. Presentation of CIRED and the Territorial Mobility Chair

CIRED is an applied economics laboratory that brings together ENPC, CNRS, AgroParisTech, CIRAD and EHESS. Its research focuses on the environmental (energy, climate, biodiversity) and social transition of anthropized systems such as cities and their mobility. CIRED is an internationally recognized laboratory for its expertise in prospective modeling, particularly on issues of climate change mitigation, changes in land use and urban system dynamics.

The "Territorial Mobility" Chair is a research partnership between ENPC and IDFM, the organizing authority for mobility in the Paris - Ile-de-France region. Between 2010 and 2019, the Chair focused on modeling user and vehicle traffic on a public transportation network. For the period from 2020 to 2025, the Chair is focusing on the economics of public transport and anticipating the future mobility system. Its areas of research are arranged in four largely overlapping themes:

- A. Knowledge and foresight of the transport offer in the regional territory,
- B. Statistical knowledge and foresight of the demand for mobility.
- C. Economics of mobility: household budgets (in money, in time) and the issue of mobility permits,
- D. Supply-demand-use-impact simulation, with applications at the regional scale.

2. Description of the position

The Chair is recruiting a Research Officer (RO) in Mobility Economics, in order to develop research in the above-mentioned areas. The expected contributions will combine economic theory, a modeling of the mobility system and an application to the Ile-de-France region:

- Economics of supply and services: what are the conditions of profitability for shared mobility services (transport on demand, carpooling, shared vehicle systems)? (See Berrada et al. 2019, Leurent 2020).
- Economics of demand: individual mobility situations and choices (equipment in means of mobility such as vehicles and subscriptions, uses in a travel situations and activity program) will be placed in the household's overall consumption, considering both the monetary budget and the time budget per individual day (see De Lauretis, 2017), in order to shed light on their interdependencies.
- Prospective study of mobility supply and demand in Ile-de-France: design, simulation and evaluation of scenarios, with special attention to energy consumption and carbon emissions, as well as potential instruments for public policies. See Leurent and Li (2020).

These activities will be carried out under the supervision of the Chair's director, in collaboration with a research engineer in applied computing and young researchers (doctoral students, master's students on a final year assignment or project course). The RO will co-supervise a doctoral thesis on mobility permits in the Ile-de-France region. In a transversal way, the RO will participate in the communication of the Chair and in its promotion among those concerned (IDFM, but also the transport operators and the local authorities, in particular the Ile-de-France Region, as well as the State).

The RO will be affiliated to the 1st axis of the laboratory's research project, namely "environment-development linkages at the scale of large sectors", and from a methodological point of view they will be part of the laboratory's prospective modeling team. They may be required to participate in the laboratory's prospective modeling research projects and associated publications.

Finally, CIRED is highly involved in teaching at ENPC, AgroParisTech, Science Po Paris etc. Teaching opportunities will be proposed to the RO.

3. Profile required

The position is suitable for a researcher in applied economics with a PhD and experience in applied microeconomics and/or geographic economics.

You not only have a keen economic sense of situations in terms of supply and demand, but also a strong physical sense: you will be able to analyze mobility situations in terms of entities, interactions, decision-making situations and behavioral strategies.

You are precise, rigorous and constructive.

You are fluent in written and spoken scientific communication and English.

As well as being autonomous, you know how to work in a team and communicate information.

4. Location

Place	Located in Nogent-sur-Marne (at the Jardin Tropical de Paris)
Access	15 min from the center of Paris by RER A (Nogent-sur-Marne station), Highway A4 - exit 4 "Saint Maur - Joinville" - by car.

5. Applications

Category A position: civil servant or contract employee (3-year renewable contract) and possibility of secondment. Full-time position. Statutory remuneration or according to profile and experience.

Send CV + cover letter via the application link or by email to the following address:

Fabien Leurent, ENPC-CIRED, Director of the Chair: fabien.leurent@enpc.fr

Applications are due by April 15, with a view to an interview in April/May and a position starting in the summer of 2021. Applications will be examined on a case-by-case basis as they are received.

6. Bibliographic references

Berrada, J., Andreasson, I., Burghout, W. & Leurent, F. (2019). Demand modelling of autonomous shared cabs mixed with scheduled transit. Proceedings of the 98th Transportation Research Board (TRB) Annual meeting, <https://www.researchgate.net/publication/339747740>

De Lauretis, S. (2017). Modélisation des impacts énergie/carbone de changements de modes de vie. Une prospective macro-micro fondée sur les emplois du temps. Paris-Saclay University. HAL tel-01746139.

Leurent, F. (2020) Towards Shared Mobility Services in Ring Shape. Chapter in De Lucas, S. (ed), "Transportation Systems for Smart, Sustainable, Inclusive and Secure Cities". DOI: 10.5772/intechopen.94410

Leurent, F. & Li, S. (2020) Between Pricing and Investment, What Mobility Policies Would Be Advantageous for Île-de-France? Journal of Advanced Transportation, vol. 2020, Article ID 8859913, <https://www.hindawi.com/journals/jat/2020/8859913/>

Trouvé M. (2020) Mobility tools holding and intermodality modelling in Paris. Doctoral thesis from the Université Paris-Est defended on October 23, 2020.

Trouve, M., Leurent, F. (2018). Modeling Urban Mobility at a Metropolitan Scale: a Comparison of Paris Transportation Models. Presented to Transport Research Arena 2018, TRA 2018, Vienna. (hal-01939140) <http://www.omnil.fr/> Website of the Ile-de-France Mobility Observatory.