



White paper  
Local and Regional  
authorities: how to use  
data to optimize mobility  
in towns and areas



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## Data: an unavoidable resource

Data has been more and more viewed these past few years as an unavoidable resource to lead and simplify public actions. It was first experimented by large cities and metropolises but nowadays the topic is rose even from smaller towns willing to analyze their data to learn more about their areas and to modernize their public activity.

Data has been transforming many fields, including mobility which was pushed forward by the French Law on Mobility's Orientation published in December 2019. The law's goal is to guide local and regional authorities through their transition towards new ways of moving around by reshaping local governance on mobility, considering new forms of transportation, decreasing mobility's environmental impact, and adapting areas to digital innovations. According to a recent survey, 60% of local authorities are expecting mobility innovations from data. As we are talking about both progress and sobriety, how can local and regional authorities rely on data to develop their towns and areas?

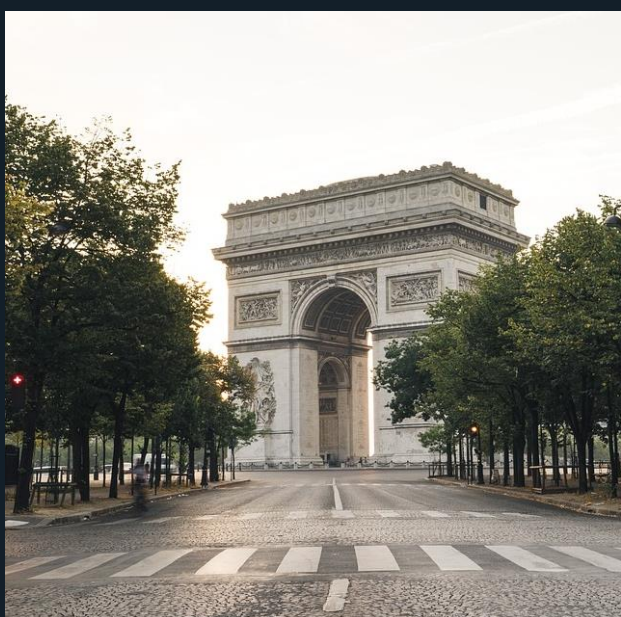


## Local authorities facing data

The Data Publica Observatory published in October its last survey on towns' knowledge about data. Numbers don't lie: when half of the local authorities have implemented processes to protect data (delegates, legal clauses, etc.), a large part of them do not carry experimental projects based on data or have not yet grasped everything data can do. And thus, despite ready to use solutions offered by private companies to meet expectations from local authorities.



Furthermore, laws on data insist upon data protection but also its public disposal – which is when the data is public, also called open data. Towns are indeed legally bound to publish their data and have it accessible on an online public platform. However, over 50% of local authorities do not have an open data set, a number which is partially explained by the lack of information on legal obligations and the lack of financial help to implement such a service.



But data is still an essential leverage to innovate in areas: it allows us to understand the initial state of our system, the beginning of any new project. Within the field of mobility, data is collected in various ways: automatic counting, field surveys or even data from driven vehicles (FCD: Floating Car Data), from our smartphones (FMD: Floating Mobile Data), cameras, Bluetooth system, and many more. They can be public and downloaded through open data platforms, or they can be private and marketed by operators. This data gives us a perspective on past situations and present ones. Added to models, it can project us in the future. Its use is essential to local authorities to optimize their public actions: evaluating political measures on transportation and mobility from the past years, understanding and estimating road flows in the area. Data's implementations are varied, from determining daily carbon emissions or local regulations (on the road or public transportations), and even studying a potential project's impact.

If data is a great opportunity for local and regional authorities to optimize their areas, and as we are talking here, their mobility, what are the challenges?



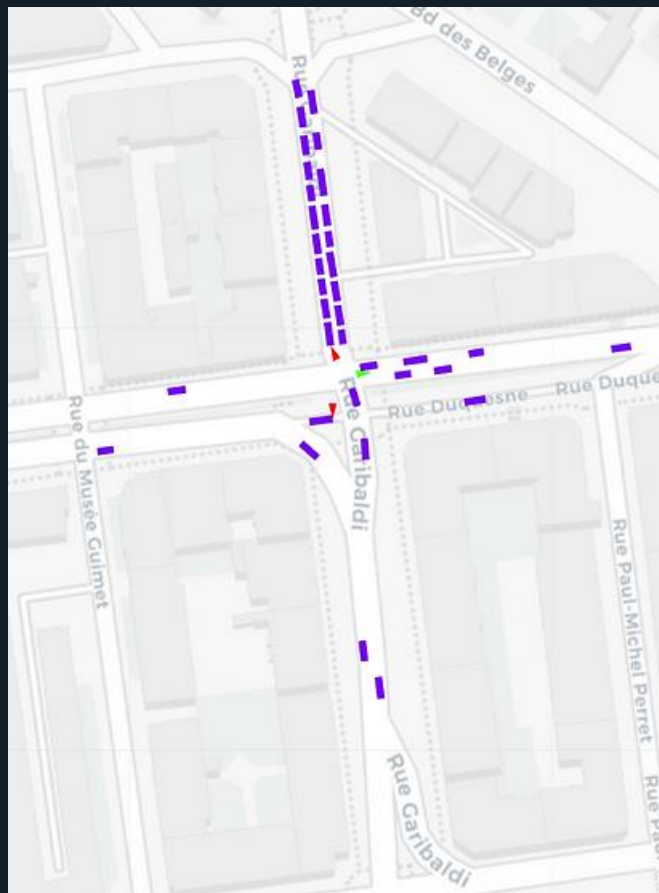
## Mobility: taking up the challenge

Local authorities are facing many challenges about mobility in their areas, including the increasing implementation of private operators: scooters, rental bicycles and cars, carpooling, etc., which are new services but also new sources to understand needs and uses of transportation in the area, and how to adapt local actions. It questions the role of local authorities in mobility, as it is about preserving the general interest from its inhabitants by ensuring the continuity of the services, their accessibility and their adaptability. The main means a local authority has is measuring (to understand), regulating (to frame uses), and broadcasting information. There are more and more local authorities negotiating disposable data (GPS traces, occupational rates, etc.) in exchange of deploying micro-mobility services in their areas. In this context, there are still many people driving cars. This mode of transportation is essential for people to move around, to feed themselves, to have access to services, to go to work, etc. They are also the causes of network saturations, greenhouse gas emissions, noises, etc.

The good news is that this issue can also be tackled by data: it gives us access to a better knowledge of the current situation but it is also fundamental to build future projects. Even better, today's data can be used to produce digital twins to test impacts from public regulations or how they affect greenhouse gas emissions. That's how low emissions areas or carpooling lanes are tested before they are deployed.

However, it is important to keep in mind that needs related to mobility are different according to the area: large cities will use collective transportation and soft means, whereas smaller towns were equipped to simplify the almost exclusive use of the car (used twice more in these areas). It is then impossible to set the same innovative scheme for all local authorities, but it makes more sense to build custom-made solutions adapted to each area.

As we understood, local authorities must adapt to the use of data to optimize mobility in all its shapes. If its practice is still uneven on areas, largest cities are already using it. It is probably a sign that financial means are at the heart of the issue. To meet such an expectation, it is becoming more and more necessary to have a simple, intuitive, collaborative tool to make easy the access to available data in our towns and help the comprehension of the mobility's challenges and enlighten the public action.



*Neovya Hubsim – Microscopic simulation*

## A platform made of data intelligence

Neovya has developed Neovya Hubsim: a secured web application helping decision-making, based on algorithms from researches on mobility. To help local authorities and road managers with their mobility and transportation projects, Neovya Hubsim gathers together functionalities able to meet all needs on mobility's data.

- Mobility data visualization and completion: the platform integrates all kinds of data formats but also generates data visualization as dashboards or even completes missing data through artificial intelligence.
- Digital reproduction of the network and flows in the area: Neovya Hubsim acts as a digital twin by modeling moving flows, with the possibility to explore results with a simple dynamic map on the platform.
- Simulation and scenari tests which would be expensive if made in real life, but easy to try on a digital twin: Neovya Hubsim is able to simulate scenari indefinitely by alternating (new measures, regulation devices, traffic management, roadworks, etc.)
- Analyzis to understand mobility in order to make the best decision: thanks to key performance indicators of transportations (traveling time, etc.) and of the environment (CO2, NOx, noise, etc.), the platform gives a complete report on the situation and compares with scenari to identify the best option.
- Simplicity and teamwork: as a collaborative platform, Neovya Hubsim is accessible 7 days a week, 24 hours a day, from anywhere. It allows you to consult the results freely, to share scenari, annotations and comments, and it generates automatic reports.
- Data centralization: public or private, all means of transportation



## Conclusion

Data is a key lever for answering to local authorities' issues. Easily analyzed, it measures the needs of public actors by adapting to reality. The mobility sector is in full digital transition, and data makes it possible to understand and observe development projects before their deployment. For now, data is still uneven on areas, but it will tend to develop over the coming years thanks to tools developed to enlighten your decisions on mobility projects.



Find out more about Neovya's solutions to make decisions on your mobility projects <https://www.neovya.com>