

## PRE-FEASIBILITY STUDIES FOR THE IMPLEMENTATION OF THE LOW EMISSION ZONE - VALENCIENNES METROPOLIS



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The computing power and speed of Neovya Hubsim made it possible to determine the impacts of implementing a low-emission zone (ZFE-m) in Valenciennes. The simulations carried out estimate and assess the consequences on the ecological and socio-economic issues specific to the studied area.



### CHALLENGE

Since 2014, Valenciennes has been actively working to reduce pollutant emissions and is aiming to establish a Low Emission Zone for mobility (LEZ) as part of this initiative. Neovya was tasked with estimating the impact of implementing this zone on traffic patterns. Specifically, Neovya was required to calibrate a multimodal transportation model, incorporating both road traffic assignment and public transport assignment, within a few weeks.



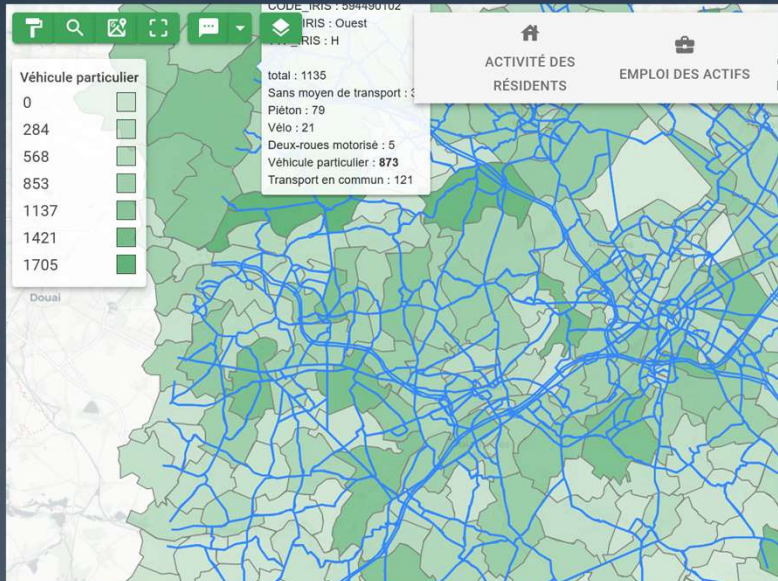
### SOLUTION

Neovya was selected to conduct the study using its software tool, Neovya Hubsim. The Neovya team executed static simulations directly within Hubsim, covering an area broader than the Valenciennes metropolitan region to account for traffic flows from neighboring areas. With its ultra-fast multimodal transportation model, Neovya was able to test various scenarios to inform the decision-making process regarding the implementation of HOV lanes.



## À PROPOS DE

Valenciennes Métropole is an intercommunal structure in France comprising 35 municipalities surrounding Valenciennes, located in the Nord department of the Hauts-de-France region. Its mission is to enhance the quality of life for residents through joint projects in urban planning, economic development, and transportation.



## FONCTIONNALITÉS



Integration on Neovya Hubsim



Analyses of different mobility data types



Traffic analysis on key network routes, construction of a dynamic traffic mode



Multimodal traffic simulation (passenger cars, heavy vehicles, public transports, etc)



Extensive result analysis tools: maps, charts, tables, indicators.



## BENEFITS

- Synthesis of transportation offerings and user flows on the network during morning and evening peak hours.
- Reactive team, experts in mobility system modeling
- Long-term socio-economic impact estimation, including population health and healthcare system benefits
- Precise estimation of pollutant emissions